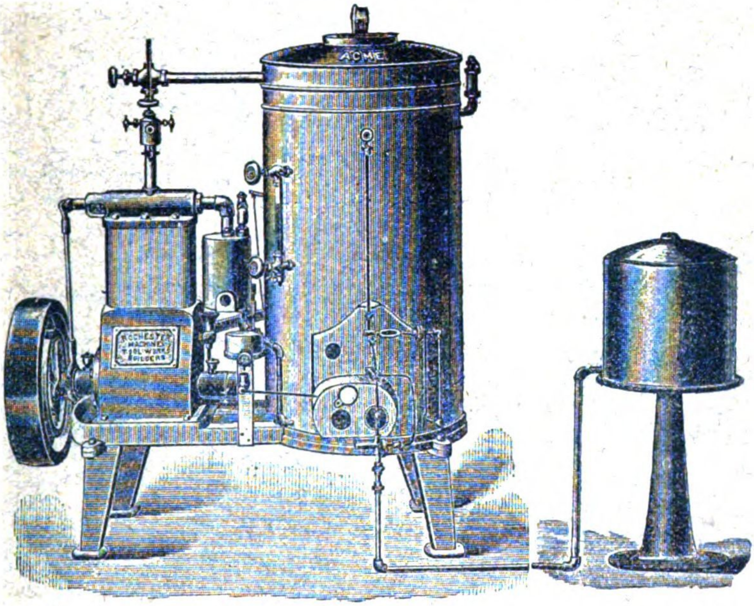
AFTER BEING ON THE MARKET TEN YEARS

The Acme Still Leads

IN EFFICIENCY, DURABILITY AND FUEL ECONOMY.


ACME
ROCHESTER MACHINE TOOL WORKS BUILDERS

ACME AUTOMATIC SAFETY ENGINE—"Stationary."   OIL TANK.

Sizes One-Half, One, Two, Three, Four, Five and Six H. P.

Arranged for either Natural Gas or Kerosene Oil Fire as Ordered.

No Extra Insurance required on account of the Oil Fire.
(See Inside of Cover)

BUILT BY

ROCHESTER MACHINE TOOL WORKS

Cor. Center and Frank Streets,
ROCHESTER, - NEW YORK.

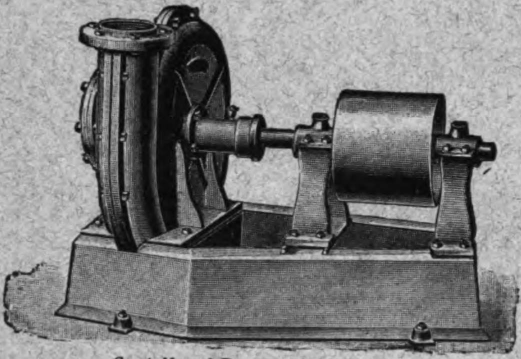
Champion Spray Pumps
and Spray Pumps of All Kinds.

WOODIN
& LITTLE,

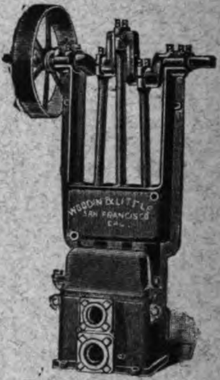
312 & 314
Market Street,

San Francisco, Cal.

Tanks of All Sizes.



Centrifugal Pumps of All Sizes.



Triple-Acting Pumps.

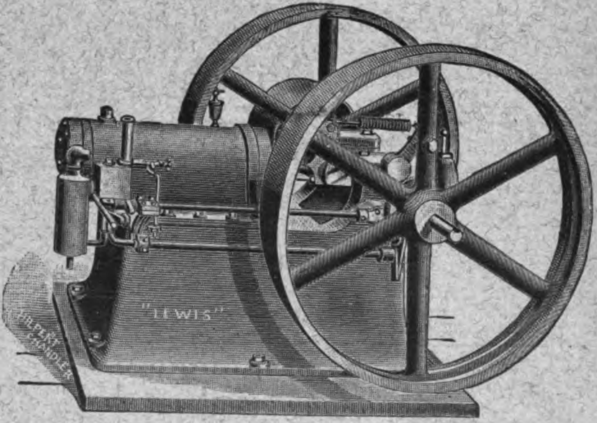
Pumps

Windmills

Tanks

Hose, Etc.,

Etc.



Horse Powers

Pipe

Fittings

Brass Goods

Etc.

Lewis Gas Engines.

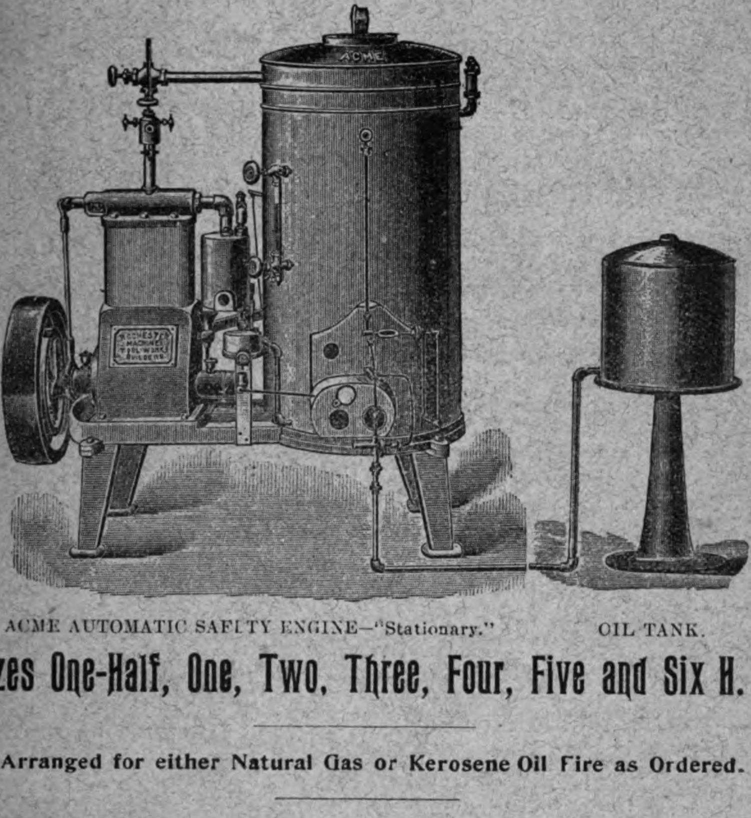
1895.

1897

AFTER BEING ON THE MARKET TEN YEARS

The Acme Still Leads

IN EFFICIENCY, DURABILITY AND FUEL ECONOMY.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Cor. Center and Frank Streets,
ROCHESTER, - NEW YORK.

NO DANGER OF FIRE.

A. J. REIBLING & SON,

General Fire Insurance.

Rochester, N. Y., May 2, 1893.

J. M. GREEN, Esq., Agent Columbia Cream Separator Co.,

Dear Sir:--In regard to your inquiry as regards the fire hazard where the Acme Safety Engine (manufactured by the Rochester Machine Tool Works) are used, would say that the many years we have insured property where these engines are used, we have never had a dollar's worth of loss.

All of our companies, viz: "Continental," of New York, the "Caledonia," of Scotland, "American," "Firemen's," and "Newark," of Newark, N. J., the "Milwaukee," of Milwaukee and "Michigan," of Detroit; all of them consider them not hazardous and make no charge for their use.

The Rochester Board of Underwriters also have investigated them very carefully, and have officially declared their use acceptable and without extra charge.

Yours very truly,

A. J. REIBLING & SON.

will not bind even if the tank and engine should not be perfectly in line. This outfit is mounted upon a hard wood frame, the bottom pieces being 2 inches thick by 4 inches wide, finished, and the cross pieces on which engine rests being 2 x 6, securely bolted together. The longitudinal pieces are of [illegible] width, from outside to outside, as will enable them to just slip in between two 4 x 4 scantlings laid on the reach of an ordinary farm wag[illegible]ile the cross pieces are made to rest on the same, and can be securely fastened to them,

The production of this outfit is the result of inquiries from several prominent fruit growers to know if we could not furnish them with a power spraying outfit that could be used on an ordinary farm wagon to do away with the running of spray pumps by hand, and at the same time give them greater force to the spray than it is practical to obtain by hand for any length of time continuously, and those who have seen it in operation (in parks and orchards) pronounce it the most perfect spraying device yet produced.

WHAT WE FURNISH:

We furnish engine and boiler, spray pump, bronze bearing and stuffing boxes for tank, bronze shaft with the propeller blades for mixing, of such length as is best suited to the tank required, the brass connection to pump for attaching two lengths of hose if desired, the steam pump and engine both fitted with sight feed oil cup, and in perfect running order. We also furnish a relief valve and connections to cask, and the connections to the bottom of cask or tank for taking out the spraying mixture, which can be connected with pump by means of rubber hose to make a flexible joint, the relief valve also being connected in the same manner, oil tank, and feed water tank of galvanized iron.

This outfit fitted up with an ordinary 52-gallon cask will occupy a space on an ordinary farm wagon 6 feet in length by 3 feet in width. When engine is not required for spraying purposes, by taking out the bolts that fasten the engine to the above frame the engine may be removed and used for running cream separator, fanning mills, pumping water, or any work on a farm which a 1 H.-P. engine and boiler is capable of doing, and can be replaced again at short notice when wanted for the next season's work in spraying. The weight of engine and boiler, oil tank, steam pump and frame, will not exceed 600 lbs.

The price of the above outfit, without tank, but with the bronze shaft and stuffing boxes, etc., ready to connect to engine, on the hard wood frame as above, would be $225.00. Or if fitted with a heavy oak 52 gallon cask, $250.00.

[illegible] when running to full capacity, would be about 3½ gallons of the cheapest grade New York State

[illegible] truly yours,

ESTE[illegible]ACHINE TOOL WORKS.

(OVER.)

SPRAYING BY HAND IS HARD WORK.

A MACHINE that will reduce the number of men required and still do 3 to 5 times the number of trees or vines in a given time is a labor-saver and a money-saver. If a 150 gallon tank is used the men who handle the spraying nozzles can ride on the top of tank, and cover a whole tree from the windward side in a breeze that would present effective spraying by hand power.

Our system of **mixing** will enable you to mix kerosene oil with water if you wish to use it on foliage.

REFERENCES.

The following are a few of the parties who used our Power Mixing and Spraying Machine in the season of 1896.

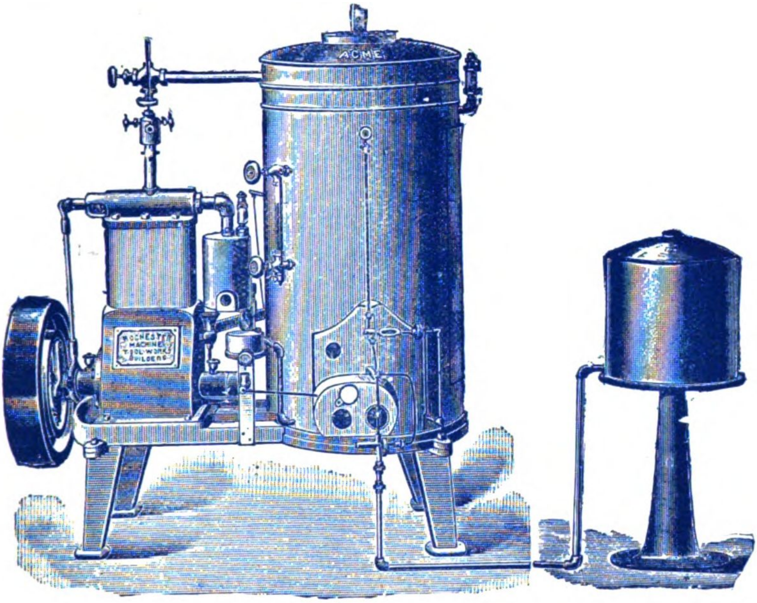
Mr. Chas. Butler, Fox Meadow Farm, Hartsdale, Westchester Co., N. Y.

Hon. T. B. Wilson, Halls Corners, Ontario Co., N. Y., who writes us after the spraying season for '96 was over. "No farmer who has ten acres of orchard can pur-

1897

SUPPLEMENT TO

CATALOGUE OF 1896.


ACME
ROCHESTER MACHINE TOOL WORKS BUILDERS

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Sizes, One-half, One, Two, Three, Four, Five and Six H. P.

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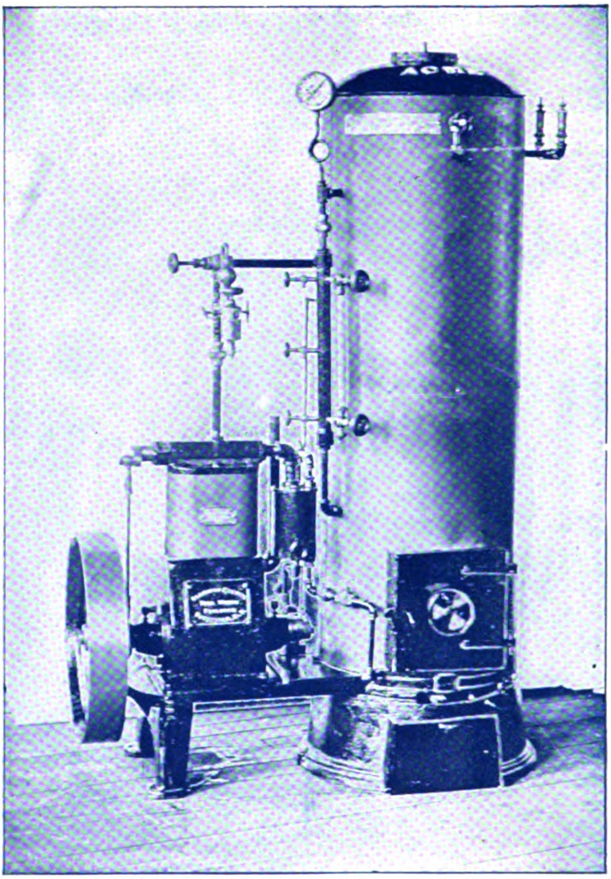
BUILT BY

Rochester Machine Tool Works,

Cor. Center and Frank Streets,

ROCHESTER, NEW YORK.

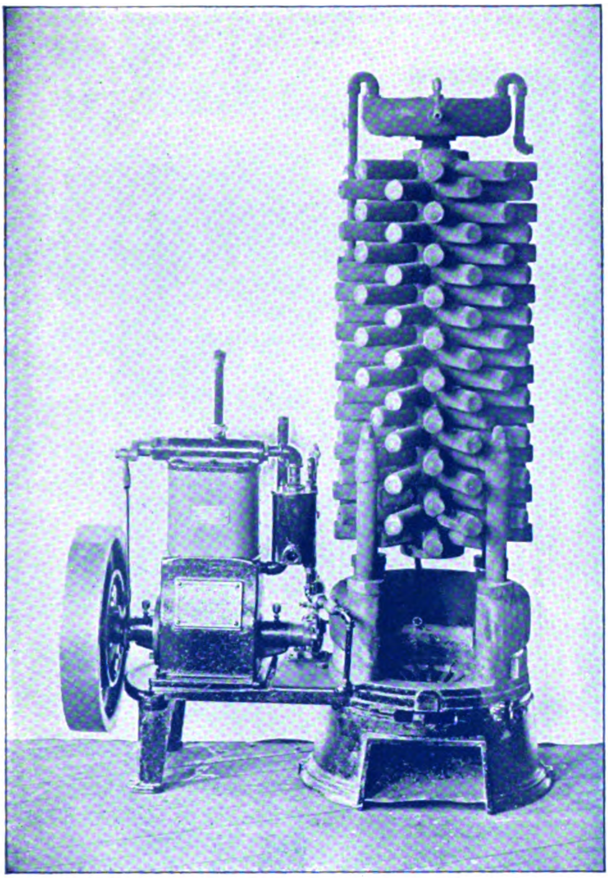


The above cut represents our new model Engine and Boiler for Coal or Wood as fuel, and are designed to meet the requirements in localities where oil is not readily obtained. The Engine is the same model we have used for the past ten years with our oil and natural gas burning Boilers, has the same automatic governor in band wheel for regulating the amount of steam used to duty performed, and same automatic control of the supply of water to Boiler. Steam gauge reading to 160 lbs., pop safety valve set at 125 lbs., but can be readily adjusted to any desired pressure. Sight feed lubricator, feed water heater, etc.

SIZES NOW READY FOR DELIVERY.

2 H. P. Floor space required, 54 in. long x 24 in. wide, band wheel 15 in. in diameter, speed 350 rev. per minute, weight about 600 lbs. Price.......	$200
3 H. P. Floor space required, 55 in. long x 25 in. wide, band wheel 15 in. in diameter, speed 350 rev. per minute, weight about 700 lbs. Price.......	$250
4 H. P., 6 H. P. Boiler. Floor space 56 in. long x 30 in. wide, weight 1,200 lbs. Price......	$375

The above prices are delivered F. O. B. Rochester, N. Y., in good shipping order. Larger sizes to follow. We have a number of the above already in operation that are giving most excellent satisfaction.



This cut gives an illustration of the Boiler used with our Coal or Wood burning Engines with the jackets removed. The upright center tube is of heavy wrought iron or steel pipe, and the radial tubes are of the same material, so spaced as to break the upward current of the flame through and around them. The fire pot is surrounded by water bearing surface and requires no fire brick. Has shaking and dumping grate and ample grate surface, and the steam dome at the top provides for dry steam. A small steam blower is provided for forcing the fire when needed. Draught is regulated by slide in door and door of ash pit. The jackets are of heavy sheet iron and are readily removed. The special advantages are, quick steaming, light consumption of fuel for work performed, the ease with which it may be cleaned, the rapid circulation provided for by the attachment of center column to water base, and the connections for water glass and for the float case that regulates the action of feed pump. The tubes have a new center piece in each of the "Porcupine" tubes, ensuring a circulation never before attained in this style Boiler.

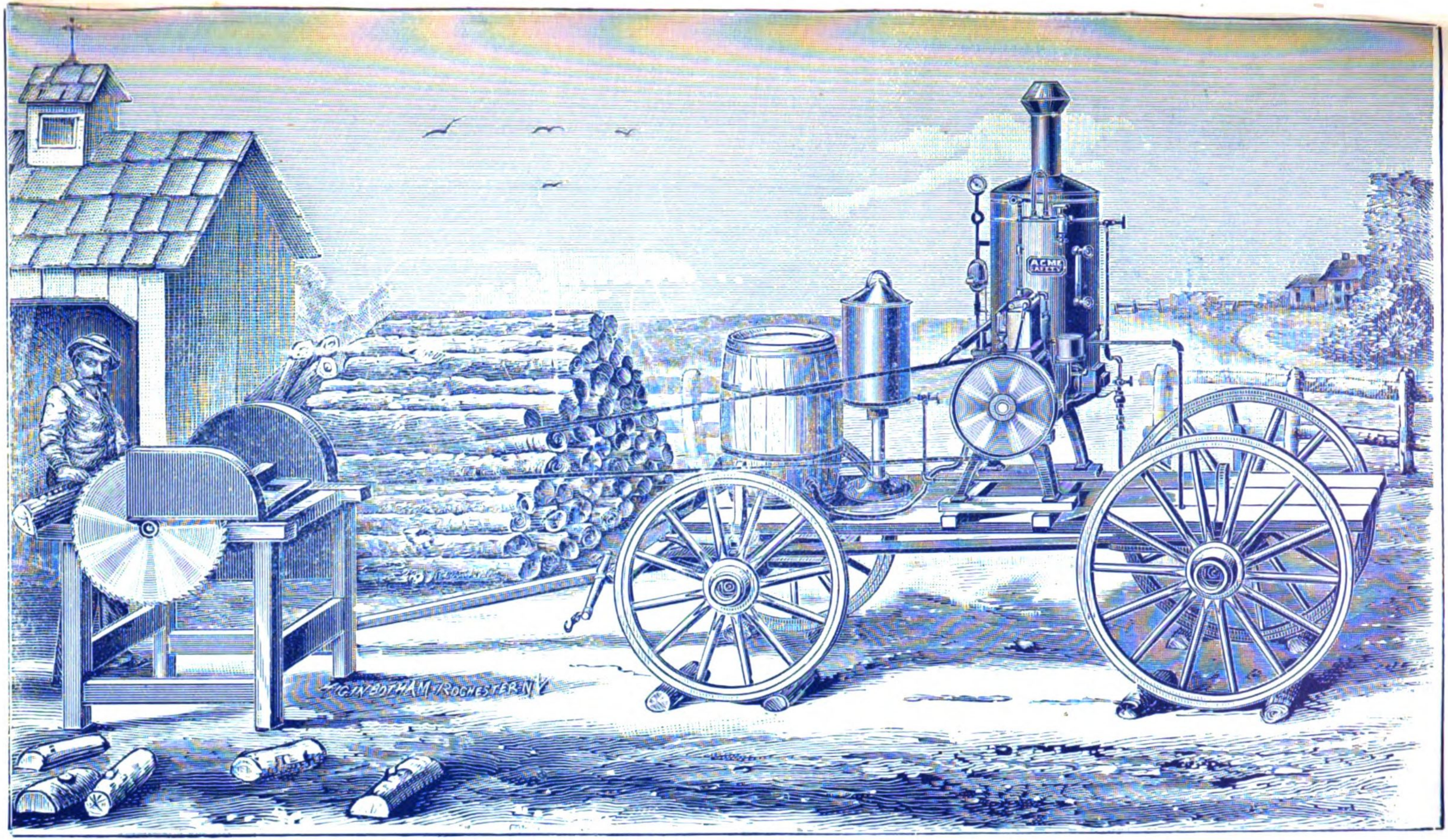
These boilers are tested to 350 lbs. pressure before leaving our works. Can be changed to burn Natural Gas, at small cost.

Send for complete Catalogue of Engines and Boilers.

ROCHESTER MACHINE TOOL WORKS, Builders,

39162

ROCHESTER, N. Y.



The above Cut represents our 3 H. P. Acme Engine and Boiler, mounted on an ordinary Farm Wagon as it may be used as a Portable Engine.

ROCHESTER MACHINE TOOL WORKS.

A FEW OF THE USES

FOR WHICH THE

Acme Engines are the Best.

Printers--For Driving presses, paper cutters, etc.

Boatmen and Yachtmen--For special boat engines.

Butchers--For cutting and cooking sausage, steam rendering lard, grinding tools, etc.

Blacksmiths and Wagon Makers--For blowers, fans, machines and drills.

Dressmakers, Tailors, Etc.--Running sewing machines, etc.

Machinists and Wood Workers--For lathes, drills, saws, planers, etc.

Grocers--For coffee mills, roasters, etc.

Fruit Evaporators--For paring machines, slicers, choppers and exhaust fans.

Boot and Shoemakers--For all their machinery.

Farmers--For cutting and steaming feed, small mills, pumping water, cleaning grain, sawing wood, etc.

Dairymen--For churning and running separators.

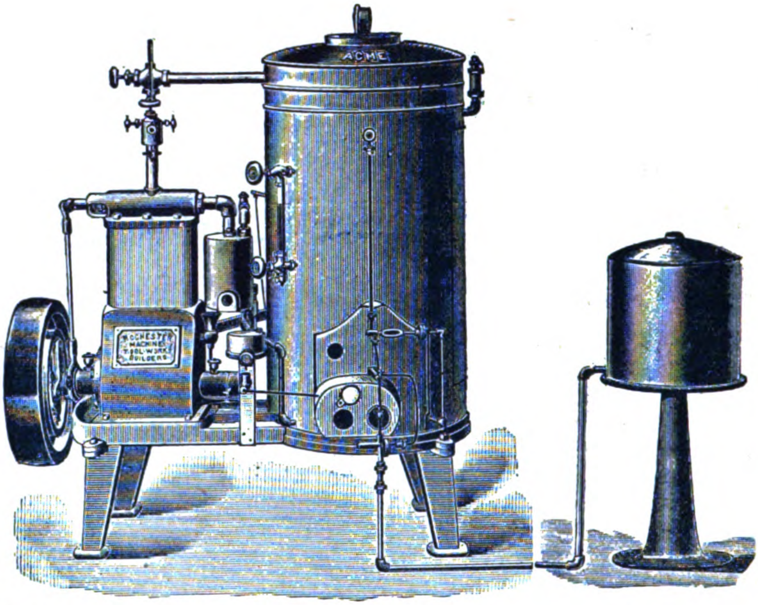
Grain Buyers--For elevating and cleaning grain.

And many other purposes too numerous to mention.

• • • •

These Engines and Boilers are no experiment, having stood the test of hard service for the past Eight Years, and their sale is constantly increasing.

YOU WILL NEVER KNOW HOW CHEAP IT IS UNTIL YOU ASK, NOR HOW GOOD IT IS UNTIL YOU TRY.


ACME
ROCHESTER MACHINE TOOL WORKS BUILDERS

ACME AUTOMATIC SAFETY ENGINE—"Stationary." **OIL TANK.**

INTRODUCTION.

• • • •

In presenting this, the eighth annual edition of our Catalogue of the "ACME AUTOMATIC ENGINE," using kerosene oil or natural gas as fuel, we desire to say that we have spared neither labor nor expense to make the "Acme" all that can be desired in a small motive power, and our success can be best measured by the results obtained at present. In the few testimonials we present it has been our aim to use those of the hundreds on file—that give evidence of the durability of our engines, and in fact those who have had them longest will give such endorsement—is the best evidence that they are all we ever claimed for them.

We are at liberty to refer to hundreds of printers from Maine to Dakota, and have engines at work in South America and China, as well as throughout Europe and Great Britain.

To those to whom our terms are cash with order or sight draft with bill of lading attached, we would say that it is impossible for us to fully inform ourselves of the standing and credit of all who are inquiring and ordering of us daily, and the only fair way is to treat all alike.

GENERAL DESCRIPTION.

THE ENGINE.

The Engine is an upright, double cylinder, single acting engine, with cranks 180 deg. to each other; pistons being 1½ times the stroke in length, form their own guides, wrist pins being slightly below the center of pistons, and steam rings above and below wrist pins. Cranks are of steel, large size in diameter and length. Main bearings are 2½ times diameter of shaft, bushed with bronze, which bearings are on the interchangeable system, and can be renewed when worn, at small cost. Cylinders are directly over the center of shaft. Valve is of the balanced rocking type, of extra long and large wearing surfaces, and is placed on top of cylinders, the valve case forming the cylinder heads. The arrangement gives opportunity for long ports, which give quick admission and release, and makes the action of the cut-off governor sensitive to the slightest change in speed or load. Fly-wheel is of cast iron, turned, true all over, perfectly balanced, and has within its periphery the automatic governor, which regulates admission of steam to suit the varying loads, by changing throw of the eccentric that actuates valve. This automatic governor is very simple, consisting of only four pieces, and is positive in its action and is peculiarly adapted to a high-speed engine in all places where an even speed is essential. Lubrication is accomplished by carrying in crank case a mixture of oil and water into which the cranks dip at every revolution, and are not only flooded themselves, but throw the oil to every part inside the case, the wrist pins in the hollow pistons getting a good supply at each stroke, also the lower part of the cylinders, whence it is wiped by the pistons. As this oil cannot escape, it is used over and over, and the oil supplied to the main bearings is all caught up by wipers and returned to the crank case at last. The eccentric rod strap and bearing, and the outer bearings of the valve stem are the only bearings not constantly flooded while the engine is running.

A hand pump is provided for filling boiler when empty, and for furnishing supply of compressed air when getting up steam at start.

Stationary engines and boilers fitted with steam gauge, reading to 160 lbs., glass water gauge, pop safety valve, automatic fire regulator; and if supply of water and fuel is constant, may be run for indefinite period with little attention and no noise or jar from lost motion, as all the labor is done in one direction. A hot bearing we have never yet known on one of our engines.

A number of the valuable features of the "Acme" are secured by letters patent and others are still pending.

For these engines we claim the following advantages over others:

1. Perfect and continuous lubrication with no waste of oil.
2. Smoothness and silence in running at high speed; no jar nor "pounding" from lost motion on the crank.

3. No stuffing boxes to be packed and kept set up to prevent escape of steam from the cylinders.

4. An automatic shaft governor that is in the highest degree sensitive to all changes in speed or load.

5. Freedom from liability to get out of order, as working parts are reduced to the smallest number consistent with economy in the development of power, and all parts are securely fastened to the proper adjustment. All the wearing surfaces are unusually large and the lubrication continuous. All parts that are liable to wear are made on the interchangeable system, so that when worn they can be renewed at small expense.

6. The Acme Automatic Safety Engine is the only oil burning engine made that will successfully run an electric light.

THE BOILER.

The boiler is of the section type, of extra strength, a rapid and economical steam generator, and has a very rapid and natural circulation, increased in its rapidity by the intensity of the fire, and all sediment is deposited in the water space below the fire, where it can be readily blown out or removed when the boiler is cold. The water being carried in a series of rings connected by inclined tubes that break joints, the fire is compelled to reach every part in its passage through them.

The boiler is double jacketed to prevent loss of heat by radiation.

This Boiler CANNOT be Disastrously Exploded.

A large ring or dome on the top of the boiler affords an ample supply of well-dried steam. The water supply is maintained by a pump worked directly from the main shaft, which forces the water through a coil heater, where it is subjected to the effects of the Exhaust Steam, before entering the water leg of the boiler; by this means the feed water is heated to near or above the boiling point before entering the boiler, without in the least choking the exhaust, or being contaminated with the cylinder oil or other deleterious substances.

The supply of water to feed pump is regulated by ball float in a case attached to the boiler, which by means of levers, controls the amount delivered at each revolution of the engine, and may be adjusted to maintain the level of water in boiler desired, under all the varying loads to which engine may be subjected.

THE FUEL.

The fuel is kerosene oil of 110° to 115° fire test (this grade giving the best results), atomized by a steam jet, and controlled by an automatic fire regulator that reduces, or cuts off entirely the supply of fuel when the steam pressure reaches the limit at which the regulator is adjusted. This fire gives a most intense flame and heat, is easily controlled, makes more even and constant supply of steam from the same amount of heating surface than any other fuel, except natural gas mingled with air, and it is a matter of doubt which of these two give the hottest flame. The fuel is cleanly; no dust, ashes, or smoke; when the fire is properly adjusted gives a steady fire with little or no attention, and is generally cheaper than coal. As it is not subject to any heat or flame until it enters the fire tube, it is safer than any oil lamp.

☞The Fuel Oil made from the Lima (Ohio) Crude, may also be used to advantage in the larger sizes.

FOR OUR FUEL SUPPLY.

We supply a cylindrical tank of Galvanized Iron, 12 in. diameter and 20 in. high for one and two H. P. Engines. The tank for four H. P. being in due proportion. The tank is placed on a suitable stand, the bottom being as high or higher than the burner. The oil flows freely to the atomizer and is regulated by the cap of atomizer as before. There is also an automatic self-closing valve located on the oil pipe that shuts off the oil when steam is shut off from the atomizer, either by hand or action of the fire regulator.

The advantages of this construction are: 1st. The oil is more sure to be delivered in proper quantities. 2d. The atomizer is less liable to clog. 3d. The oil can all be drawn from the tank. 4th. Less liability of getting water into oil tank. 5th. The floor under engine and boiler can be kept clean much easier. 6th. The oil cannot become heated and all possibility of it taking fire is precluded by locating at a safe distance. 7th. There is less loss of fuel by evaporation. If desirable a barrel of oil can be elevated 12 to 14 inches and piped direct to burner and avoid the daily filling of oil tank.

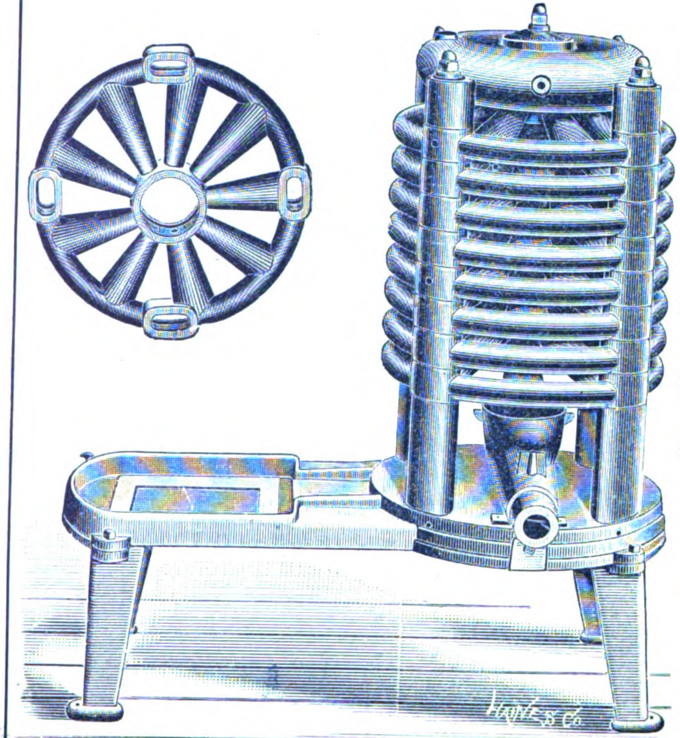
Columbia, or Farm Model Engines and Boilers

These Engines are the same as the engine part of the regular Acme Engine, and the boilers fully as efficient in producing steam, and are designed to meet the needs of those who wish power for cream separators, fodder cutters, sawing wood, etc., on the farm, and are somewhat less complicated in construction. The fire regulator used on the regular Acme Engine and Boiler is dispensed with, and the oil tank is not elevated, and provision is made for taking live steam for boiler for cooking feed, heating water, or scalding dairy implements; and are built in the following sizes, viz.:

One H. P. Band Wheel, 9 in. diameter, 500 revolutions per minute. Price	$135
Two H. P. Band Wheel, 14 in. diameter, 350 revolutions per minute. Price	$210
Three H. P. Band Wheel, 15 in. diameter, 350 revolutions per minute. Price	$260

In ordering the above please use the word Columbia, or Farm Model Engine and Boiler.

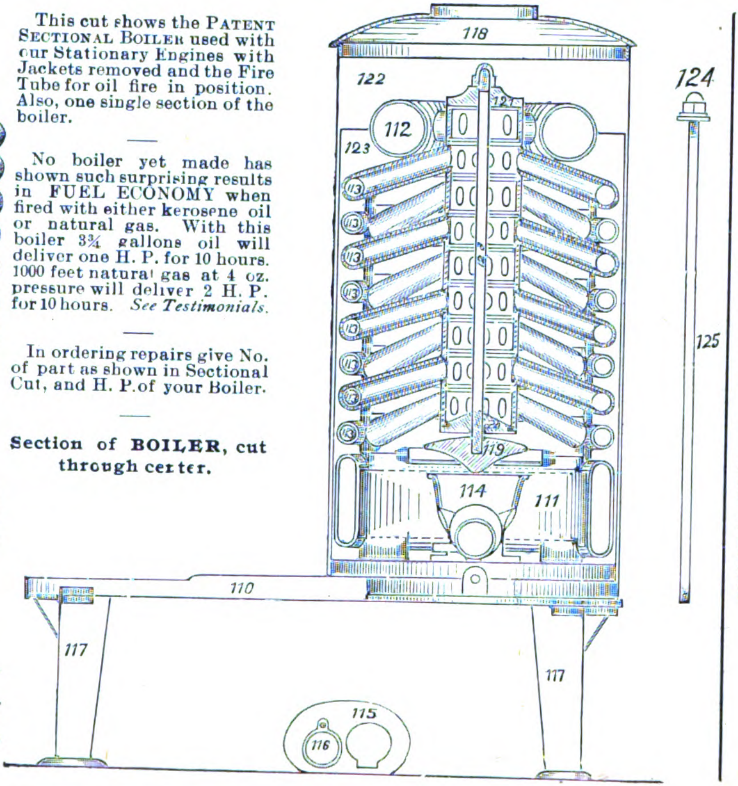
We are also prepared to furnish our Engines with our Patent Boiler arranged for burning coal or wood where oil is too expensive. No Boiler yet made has shown such remarkable efficiency fired with coal or coke as our Patent Boiler shown on page 6 of this Catalogue.



This cut shows the PATENT SECTIONAL BOILER used with our Stationary Engines with Jackets removed and the Fire Tube for oil fire in position. Also, one single section of the boiler.

No boiler yet made has shown such surprising results in FUEL ECONOMY when fired with either kerosene oil or natural gas. With this boiler 3¾ gallons oil will deliver one H. P. for 10 hours. 1000 feet natural gas at 4 oz. pressure will deliver 2 H. P. for 10 hours. *See Testimonials.*

In ordering repairs give No. of part as shown in Sectional Cut, and H. P. of your Boiler.



Section of BOILER, cut through center.

PRICE LIST

—OF THE—

Stationary Acme Automatic Safety Engines

With our Patent Non-Explosive Sectional Boiler. Kerosene Oil or Natural Gas as Fuel.

One-half H. P., weight 180 lbs., extreme floor space, 27x14 in., Pulley, 7 in. diam., with additional Grooved Pulley for round belt, 2½ in. diam., for either oil or gas fire as ordered. Price..	$100
One H. P., weight 400 lbs., extreme floor space, 32x24 in., Pulley 9 in. diameter, 500 revolutions per minute, fuel kerosene oil. Price	$150
Two H. P., weight 720 lbs., floor space 42x28 in., Pulley 15 in. diameter, 400 revolutions per minute, fuel Kerosene Oil. Price	$225
Three H. P., weight 850 lbs., floor space 46x30 in., Pulley 15 in. or 18 in., as ordered, 350 to 400 revolutions per minute, fuel Kerosene Oil. Price	$275
Four H. P., weight 1,100 lbs., floor space 52x38 in., Pulley 20 in. diam., 350 revolutions per minute, fuel Kerosene Oil. Price...	$350

Prices for Engines and Boilers as above to burn Natural Gas for fuel instead of the oil fire:

One H. P.	$135	Three H. P.	$250
Two H. P.	$200	Four H. P.	$325

We can change from Oil to Gas, or Gas to Oil, at slight expense, when desirable.

STATIONARY ENGINES AND BOILERS.

SPECIAL SIZES.

One H. P. Engine with 1½ H. P. Boiler	$160
Two H. P. Engines with 3 H. P. Boiler	$250
Four H. P. Engine with 6 H. P. Boiler	$375
Five H. P. Engine with 6 H. P. Boiler	$400
Six H. P. Engine with 8 H. P. Boiler	$525

The above will be found specially adapted to the needs of those who wish extra steam for any use, or to develop unwonted power on occasion.

The stationary Engines have Automatic cut-off governors, take up but little room and are noiseless in operation; are all ready to connect the steam and exhaust pipe, and suited for driving Dynamos or Yachts or other steamers, or any duty for which a small Automatic Engine is desired.

For price, etc., of Engines and Boilers for U. S. waters see next page.

These extra sizes are for the use of those requiring steam for any purpose besides power.

SIZES AND PRICES

OF OUR

BOAT ENGINES AND BOILERS

FOR USE ON WATER WHERE U. S. INSPECTION IS REQUIRED.

FOR CUT OF SAME SEE OUTSIDE BACK COVER.

One H. P. Engine, 1½ H. P. Boiler, weight about 375 lbs., space occupied in boat 33 in. long by 27 in. wide to clear all attachments. Price.. $170

Two H. P. Engine, 3 H. P. Boiler, weight about 600 lbs., space occupied as above, 41 in. long by 30 in. wide. Price.......... $275

Four H. P. Engine, 5 H. P. Boiler, weight about 800 lbs., space occupied as above, 50 in. long by 36 in. wide. Price........... $400

Six H. P. Engine with 8 H. P. Boiler, weight about 1,800 lbs., space occupied in boat 60 in. long by 44 in. wide. Price........... $550

The above Engines and Boilers have their center of gravity very low. Can be run at a high rate of speed without jar or racking the boat, and are fitted with steam and water glass gauge, and also water gauge cocks, feed water heater, and pump; also with injector as supplemental in case pump should fail, and, in fact, are fitted out complete to meet the requirements of the U. S. laws governing the inspection of such engines and boilers. Also with a steam syphon to eject the bilge water, sea cocks, etc., at the prices as above.

PRICE LIST

OF OUR

BOAT ENGINES AND BOILERS

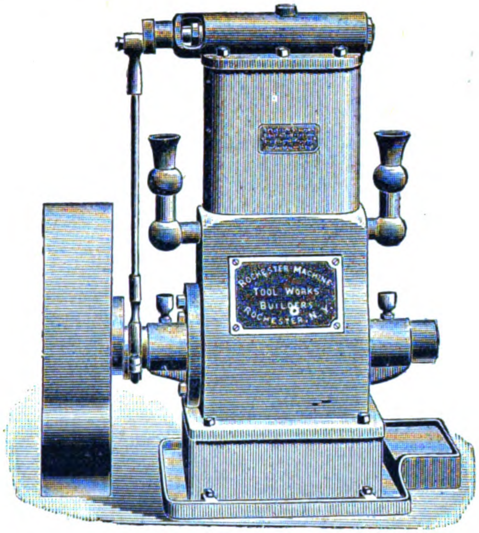
FOR USE ON WATER WHERE U. S. INSPECTION IS NOT REQUIRED.

One H. P. Engine, 1½ H. P. Boiler, delivering 1½ H. P. on shaft on a boiler pressure of 90 lbs., can carry with safety 140 lbs. boiler pressure. Price.. $160

Two H. P. Engine, 3 H. P. Boiler, delivering 3 H. P. on shaft, on a boiler pressure of 90 lbs., can carry with safety 140 lbs. boiler pressure. Price.. $250

Four H. P. Engine, 6 H. P. Boiler, delivering 5 H. P. on shaft, on a boiler pressure of 90 lbs., can carry with safety 140 lbs. boiler pressure. Price.. $375

ACME STATIONARY ENGINE ONLY.


ROCHESTER MACHINE TOOL WORKS BUILDERS ROCHESTER, N. Y.

FOR USE WHERE PARTIES ALREADY HAVE STEAM.

Licensed under the "Westinghouse" Patent.

These Stationary Engines have automatic shaft governor, that will control the speed to a variation of only two and one-half per cent from full load to no load. They will deliver their full rate of power on the belt with steam at boiler pressure of 70 lbs., and run with less jar, and with less attention than any small engine built, and are furnished with throttle valve and sight feed cup for Cylinder Oil at slight advance in price when so ordered.

PRICES.

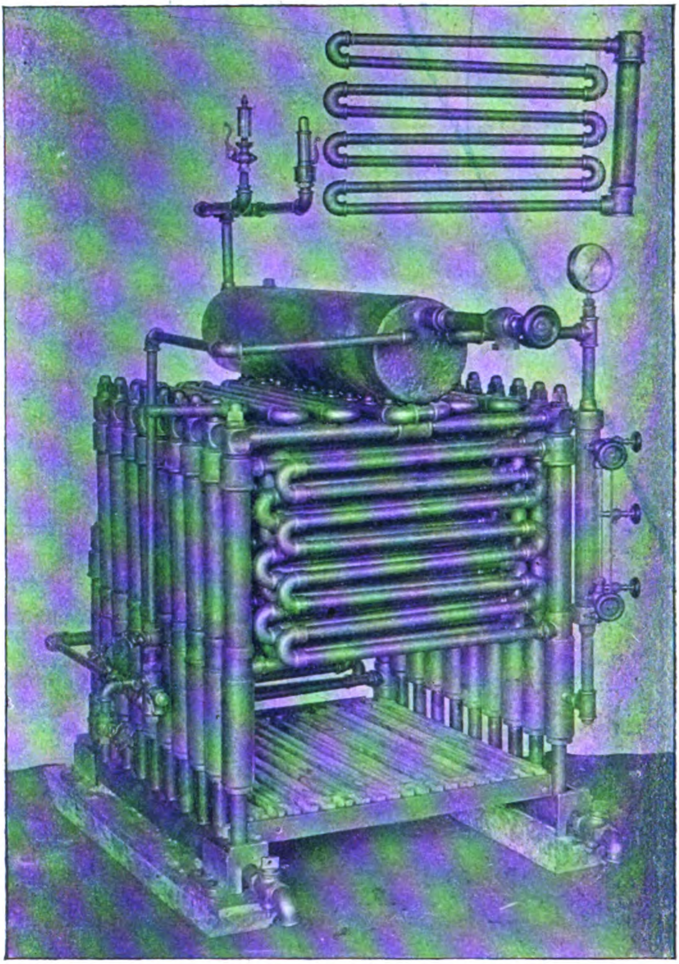
½ H. P. Acme Cylinders, 1½ in. diameter x 2 in stroke, crank shaft 15 in. diameter, fly-wheel 8 in. diameter, speed 500 to 650 revolutions per minute. Price	$45
1 H. P. Acme Cylinders, 2⅛ in. diameter x 2½ in. stroke, steel crank shaft 1½ in. diameter, fly-wheel 9 in. diameter, speed 450 to 650 revolutions per minute. Price	$60
2 H. P. Acme Cylinders, 3 in. diameter x 3½ in. stroke, steel crank shaft 1¼ in. diameter, fly-wheel 15 in. or 18 in. diameter, as ordered, speed 350 to 550 revolutions per minute. Price	$85
3 H. P. Acme Cylinders, 3¼ in. diameter x 3½ in. stroke, steel crank shaft 1¼ in. diameter, fly-wheel 15 in. or 18 in. diameter, as ordered, speed 350 to 550 revolutions per minute. Price	$100
4 H. P. Acme Cylinders, 4 in. diameter x 4 in. stroke, steel crank shaft 1½ in. diameter, fly-wheel 20 in diameter, speed 300 to 500 revolutions per minute. Price	$125
5 H. P. Cylinders, 4 in. diameter x 5 in. stroke, steel crank shaft 1½ in. diameter, fly-wheel 20 in. diameter, speed 300 to 400 revolutions per minute. Price	$150
6 H. P. Cylinders, 5 in. diameter x 5 in stroke, steel crank shaft 2 in diameter, fly-wheel 23 in. diameter, speed 300 to 400 revolutions per minute. Price	$225

The above Engines are furnished with feed water pump and feed water heater, when so desired, at prices ranging from $12 to $25, according to size of Engine.

Marine or Reversing Engines only furnished at the same prices for corresponding sizes.

THE BUCKLEY

PATENT SAFETY WATER TUBE BOILER.



With Jackets removed; also one of the Water Bearing Sections. Points of superiority: Positive circulation; abundance of steam room; can be easily and quickly repaired when necessary; no left hand threads in this Boiler; can be built to conform to boat, long and narrow, or nearly square as desired; can be fired with wood, coal or coke, or arranged for oil fire, as desired; light; comapct; strong; can be built to carry 300 lbs. of steam if desired. Give us the size of your engine or boat and get our prices before ordering elsewhere.

Our Patent Sectional Boiler,

USING WOOD, COAL OR COKE AS FUEL.

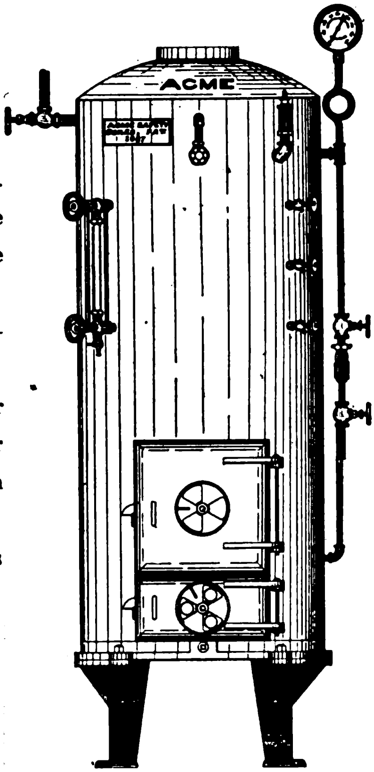
Cannot be disastrously exploded.

No other Boiler yet made has the same efficiency on the same grate surface or amount of fuel.

Can be used at any steam pressure up to 180 lbs.

Fitted with steam gauge, water gauge and automatic injector for supplying Boiler with water when used without Engine.

See Cut of Boiler without Jackets on page 6.



SIZES AND PRICES.

2 H. P. Boiler as above	$140
3 H. P. Boiler as above	$175
4 H. P. Boiler as above	$200
6 H. P. Boiler as above	$250

Our regular Acme Engines with the above Boilers are furnished at same prices as those for burning Natural Gas as fuel, and have automatic supply of water to Boiler when Engine is running.

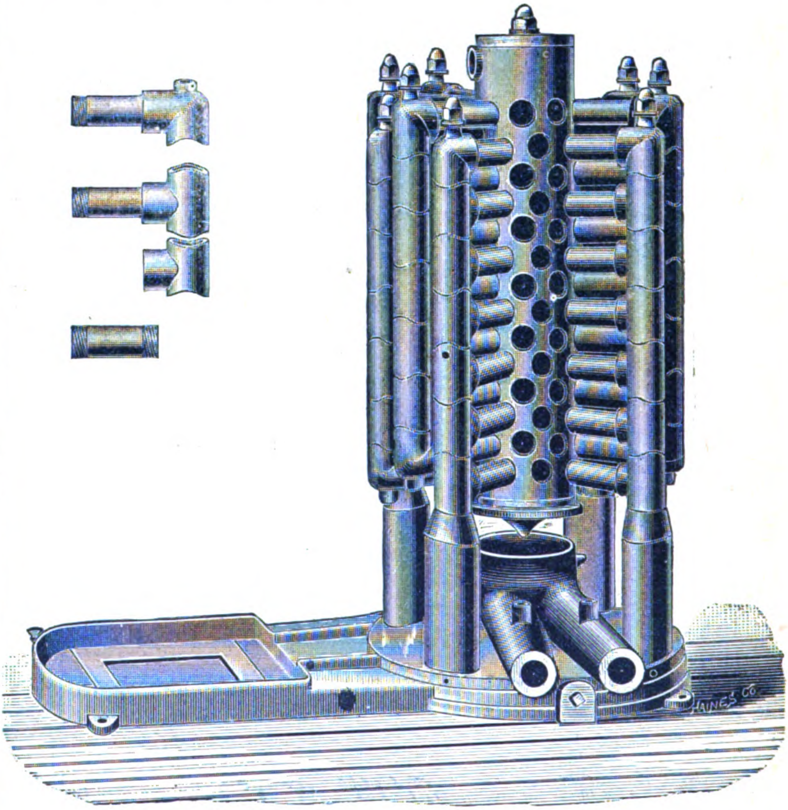
THE BRAGGIN'S

Wrought-Iron Sectional or Water Tube Boiler

Approved by the Board of Supervising Inspectors of Marine Boilers of the U. S., at their Annual Meeting Jan. 1889.

For Use in Small Yachts and Launches on Waters where U. S. Inspection is required.

Jackets removed. Also three rows of tubes and fittings (the better to show the construction) whereby positive and free circulation is secured. Also plenty of dry steam for engine, also the manner of making the joints so that a single tube may be removed and replaced without interfering with the rest of the boiler. Also the Fire Tube in position. For further description see next page.



The above boiler possesses the same features that have made our patent boiler so famous for the amount of work done with a given amount of hydro-carbon fuel, and freedom from liability to explosion.

DESCRIPTION

OF THE

BRAGGIN'S

Wrought-Iron Sectional or Water Tube Boiler

The Center Tube or water column is of drawn steel tubing, which is drilled and threaded by special machinery so that the radial arms can be firmly screwed into the same. The fittings that connect the outer ends are also made by special machinery, so that when they are screwed to their place, a very thin copper gasket makes a steam tight joint. A steel rod or bolt is then passed through from top to bottom and secured by the nut, thus securing ample water way at both ends of the radial tubes, which are of best boiler tubing.

This boiler is made of a series of independent sections of connected radial tubes, each section having a free and natural circulation of its own, giving the steam ample space to escape freely from the water.

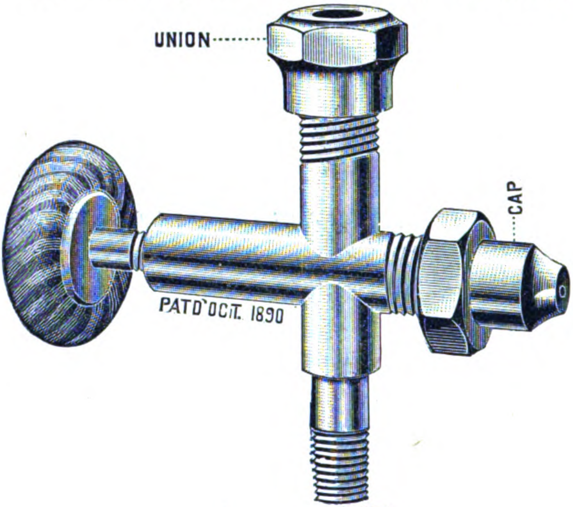
Natural circulation and ample steam space are the most important features of a good Marine Boiler.

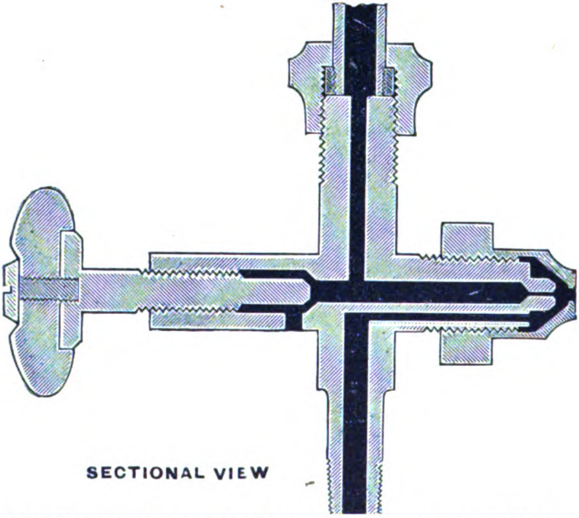
These Boilers have met with great favor during the past five seasons on the market, and their H. P. is based on a boiler pressure of 80 lbs. of steam, at 130 to 150 lbs., as they are commonly used, their capacity is correspondingly greater. They are also durable. Although a large number have been in use for three years and longer, we have as yet no calls for new parts to repair them. Being double jacketed with asbestos felt between inner and outer jacket, they do not render a boat uncomfortable from the heat. Their small diameter renders it practical to place the 5 H. P. boiler in a boat only 4 ft. 6 in. beam. The atomizers used with these boilers are the patent atomizer shown and described on page 14 of this catalogue. The steam and oil connections being of ⅛ inch iron pipe, are strong, and not easily choked. The torch is formed by a drip of oil into a pocket containing asbestos fibre, and enclosed from wind and rain.

Our improvements for the present season dispense with the larger part of the noise of the Hydro-Carbon fire.

THE BUCKLEY PATENT ATOMIZER.

USED WITH 3 H. P. BOILERS AND LARGER.

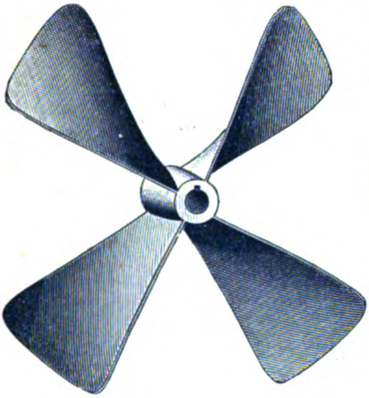


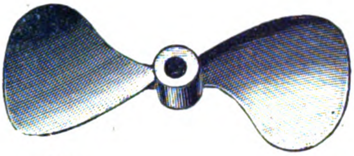


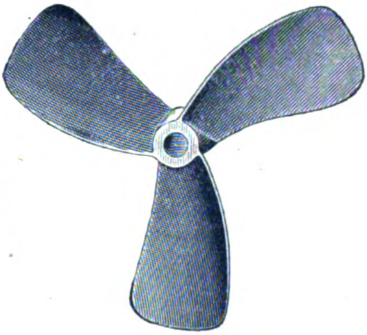
SECTIONAL VIEW

This Atomizer is the result of six years' experience with oil as fuel, and will use either the refined oils, fuel oils, or even crude oil, if the temperature of the same be kept at 70 degrees or above. They are intended to connect with ⅛-inch iron pipe, and are furnished with a brass union on the top or steam connection. The oil end is threaded for ⅛-inch iron pipe. As shown in the sectional view backing the wooden handle of the rear plug permits steam or compressed air to blow through the same freely through the large outlet. After a period of rest the steam pipe will become partly filled with water from condensation; by opening this outlet it is quickly disposed of without forcing it into the fire tube, where its presence is objectionable. As soon as atomizer is hot or dry closing this outlet permits the spray of fuel to be delivered in the fire tube. The construction of the cap is such that it can be screwed up against nozzle, forming an oil-tight joint when desired. The large parallel passages for oil and steam permit the oil to be heated before being sprayed. The price of these patent Atomizers with union, is $3.00 each, net.

Propeller Wheels for Yachts.







Iron and Bronze Propeller Wheels.

TWO BLADE.

DIAMETER.	PITCH.	IRON.	COMPOSITION
14 inch	24 inch	$ 6.00	$ 8.75
18 inch	32 inch	6.75	10.75
20 inch	36 inch	9.00	12.00
24 inch	36 inch	10.00	13.75

THREE BLADE.

DIAMETER.	PITCH.	IRON	COMPOSITION
17 inch	26 inch	$ 6.00	$10.00
19 inch	26 inch	8.00	12.00
22 inch	40 inch	10.00	15.00

FOUR BLADE,

DIAMETER.	PITCH.	IRON.	COMPOSITION
18 inch	36 inch	——	$16.00
12 inch	38 inch	——	20.00
24 inch	42 inch	——	24.00

We will furnish any of the above Wheels straight bored with Key Seat and Set Screw if desired. Will furnish the Composition Wheels highly polished for the additional cost of the labor.

Extras for Boat Engines.

One H. P. Engine, ⅞ in. steel shaft, wheel, stern bearing and stuffing box..........	$15
Two H. P. Engine 1⅛ in. steel shaft, wheel, stern bearing and stuffing box............	$25
Four H. P. Engine, 1¼ in. steel shaft, wheel, stern bearing and stuffing box.............	$35

The propeller wheels we furnish are cast from bronze metal, are light, smooth and strong.

We also furnish cast iron wheels from the same patterns, if desired.

Testimonials from Butchers and Markets.

THE "ACME" RUNNING A MEAT CHOPPER.

Office of Peter Tlusty. Milwaukee, Wis., August 12, 1887.
Rochester Machine Tool Works:

Gentlemen—The one H. P. Acme Automatic Safety Engine I bought last March from Fred Weiss, of this city, who had used it for six months previous, is doing some good work for me. It runs the large meat cutter made by S. V. Brecht, of St. Louis, Mo., cutting 350 to 400 pounds of meat per hour. It took two men 4 hours to cut the same amount by hand. I used but 3½ gallons of oil for 10 hours' run; and for safety, economy, and the little attention it requires to run it, I can cheerfully recommend it to anyone who has use for small power.

Respectfully yours, PETER TLUSTY.

Office of J. C. Clink, Packer and Dealer in
Fresh, Salt and Smoked Meats, Poultry, etc.
Fred Weiss, Esq.: Berlin, Wis., Nov. 29, 1889.

Dear Sir—In regard to the two H. P. Acme Automatic Safety Engine I bought of you 10 months ago, would say it has given me the best of satisfaction in every respect, and sausage making is a pleasure now when it used to be very hard labor, running a Smith & Sons' chopper with ease. I tested my engine very hard, running a 22 in. cut-off saw 1,600 per minute, sawing hickory wood and doing the work without any trouble at full speed, and can freely recommend the same to any needing power. Any information regarding the same will be cheerfully answered. Respectfully yours, J. C. CLINK.

Office of Fred Weiss, 502 Wells St. Milwaukee, Wis., Aug. 25, 1887.
Rochester Machine Tool Works:

Gentlemen—Yours of the 22d at hand, and contents noted. I am using my engine and boiler for most everything. I cook sausage and hams by steam, and also render lard, which makes the finest by using a double jacket steam kettle. I use on an average from four to four and one-half gallons of Prime White Oil in 10 hours, 139° test, which is the lowest grade I can get here; it costs 5¼ cents a gallon. I cut 2,500 pounds of meat for bolougna or summer sausage, or 3,008 pounds of pork for pork sausage, or 2,000 pounds for smoked or ham sausage, which must be cut very fine so as to take water. I sawed a cord of seasoned maple wood yesterday in an hour and fifteen minutes, and cut each stick three times. I consider this very good work, but I used 1¼ gallons of oil, as it takes from 3 to 4 H. P. I chop meat for other butchers every day, which pays all the expenses of running engine, and leaves me a small profit besides. I get ½ cent a pound for chopping for butchers, and do not lose one moment's time for myself, for when steam is once raised the engine runs nicely and takes care of itself. raise steam in 12 minutes.

Respectfully yours, FRED WEISS.

Note.—The foregoing letter is from a prominent butcher in Milwaukee, in response to a letter of inquiry in the interest of butchers and market men in Rochester, who desired to know just what Mr. Weiss was able to do with a 2 H. P. Acme. R. M. TOOL WORKS.

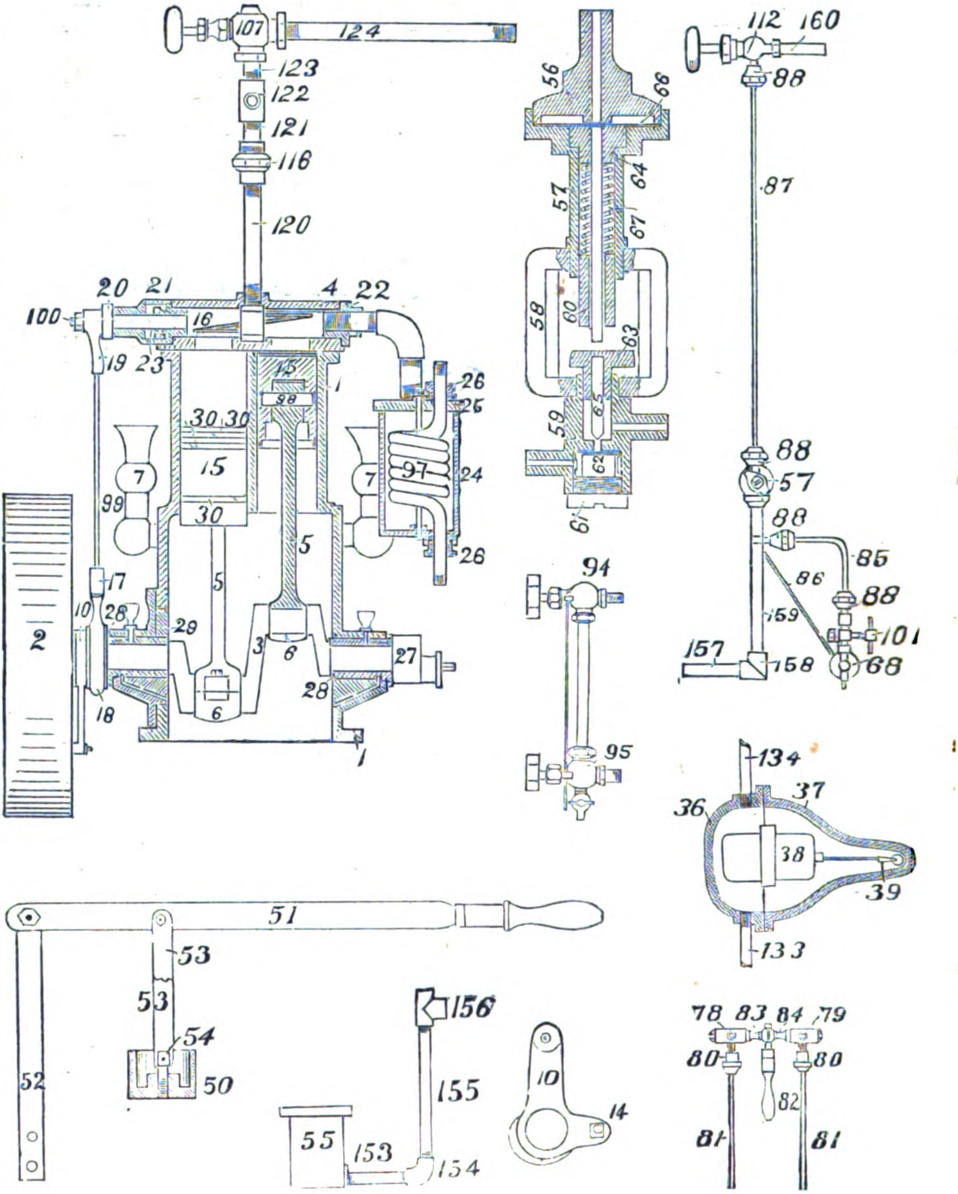
Office of Chas. Scheidler,
Mnfr of Sausage, 577 Seventh Ave. Milwaukee Wis., Dec 11, 1889.
M. Fred Weiss:

The 4 H. P. Automatic Safety Engine purchased of you, and built by the Rochester Machine Tool Works, of Rochester, N. Y., is all that you claim for it, and I am more than pleased with it. I am using the largest Power Meat Rocker Built, and use steam for cooking hams, sausages, etc. The engine does it easy at a fuel expense of 4½ cents

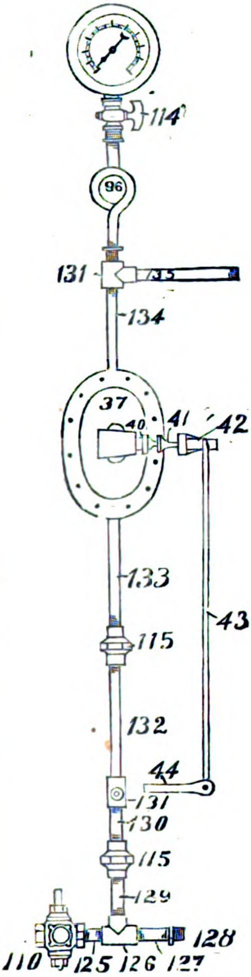
Number and Name of Parts of Acme Engine.

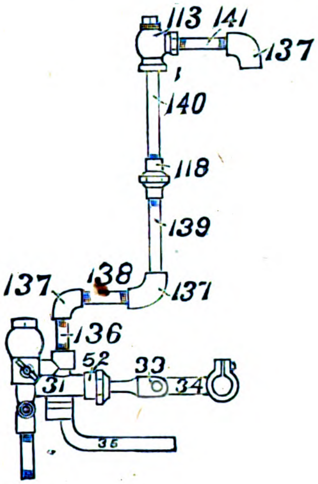
No.	Names of Parts.	Remarks.	No. Used.
1	Cylinder Frame		
2	Governor wheel.		
3.	Crank Shaft.		
4	Valve case.		
5	Connecting rod		2
6	do do cap.		2
7	Vent pipes		2
8.	Slotted link	For Governor	
9	Spring weight	do do	
10.	Eccentric	do do	
11.	Connecting Rod.	do do Weight	
12.	Spring	do do	
13.	Eye bolt	do do Spring	
14	Link block		
15.	Piston		2
16.	Valve		
17.	Eccentric strap.		
18	do do cap.		
19	do Rod Rocker bearing		
20	Valve rocker		
21.	Valve yoke		
22	Valve tail nut		
23.	Stuffing box screw	For Valve.	
24	Heater case		
25.	Heater do cap.		
26.	Stuffing box screw	For Heater case	2
27.	Pump Crank		
28	Bushings for Crank shaft.		2.
29	Flange box do do do		
30	Piston ring		6
31	Pump		
32	Stuffing box nut	For Pump.	
33.	Plunger	do do	
34.	Connecting rod	do. do	
35.	Bracket	do do	
36	Cap	For Float Case	
37.	Float Case		
38	Float		
39	Elbo	For Float	
40	Stuffing box	do do stem	
41.	Float stem		
42	do Lever		
43	do do rod		
44	Pump valve lever		
45.	Pop Valve		
46	do do Set nut		
47	do do do.		
48	do do stem		
49	Air pump		
50	do do plunger		
51.	do do Handle		
52	do do do Standard		
53.	Plunger connection		2

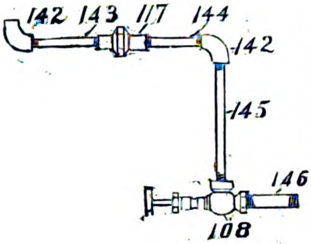
Acme Engine, Built by The Rochester Ma

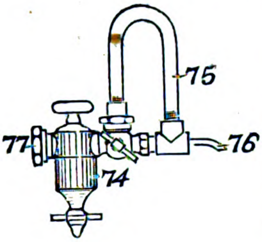


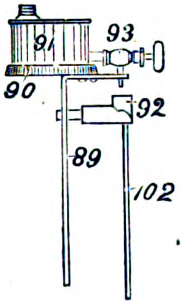
In ordering repairs give the number of part or parts wa

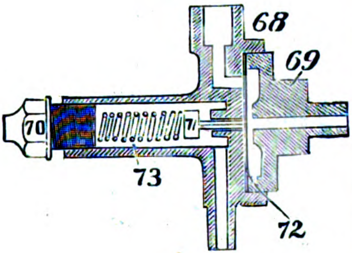


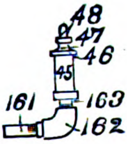


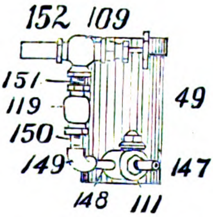


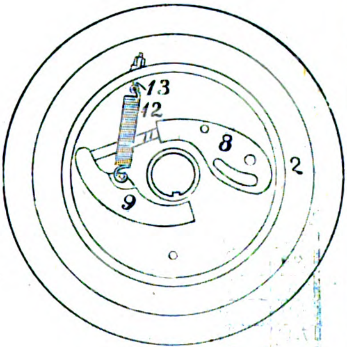












ated, and the size or H. P. of your Engine and Boiler.

Number and Name of Parts of Acme Engine.

No.	Names of Parts.	Remarks.	No. used
54.	Plunger screw		
55.	Well		
56.	Tail nut	For Regulator	
57.	Body	do	
58.	Yoke	do	
59.	Valve case	do	
60.	Spring set nut	do	
61.	Strainer screw	do	
62.	Strainer	do	
63.	Diaphram Cap	do	
64.	Spring head	do	
65.	Wire Valve	do	
66.	Diaphram	do	
67.	Spring	do	
68.	Body	For Oil Valve	
69.	Diaphram Nut	do	
70.	Spring Nut	do	
71.	Valve (triangle)	do	
72.	Diaphram	do	
73.	Spring	do	
74.	Lubricater Pipe	do	
75.	Condencer For Lubricater	do	
76.	Feed pipe do do	do	
77.	Glass sight nut	do	
78.	Right hand	Cylinder Cock	
79.	Left hand	do	
80.	Connecting Nut	do	2
81.	Pipe	do	
82.	Handle	do	
83.	Right hand Plug	do	
84.	Left hand Plug	do	
85.	Atomizer pipe		
86.	Oil Valve Pipe		
87.	Regulater Pipe		
88.	do do Nuts		4.
89.	Stand	For Torch	
90.	Base	do do	
91.	Can	do do	
92.	Drip cup	do do	
93.	Valve	do do	
94.	Top water gauge valve		
95.	Bottom do do do		
96.	Syphon	For Steam gauge	
97.	Heater coil		
98.	Wrist pin		2
99	Eccentric rod		
100.	Valve rocker pin and nut		
101.	Atomizer		
102.	Dripping pipe	For Torch	
103.			
104.			
105			
106.			

per hour. I use the exhaust steam for my dry room. I can cheerfully recommend the engine to anyone using power, and would not part with it for twice its cost if I could not get another. I would be glad to show my engine to anyone who may want to see it run.

Respectfully yours, CHAS. SCHEIDLER.

The Acme Engines in Printing Offices.

From the Weekly Review. Reidsville, N. C., May 8, 1889.

"OTHELLO'S OCCUPATION GONE."

With this issue The Review takes a new departure in the motive power which runs its press machinery. Hitherto it has been furnished by two darkies who consumed from two to three hours in turning off our weekly edition; this week it was done in less than one hour, and the power was supplied by a two-horse Acme Oil Engine. We have been paying fifty or sixty cents for each side, while now the oil and wear and tear of machinery required in the same amount of labor will not foot up 5c. The public is welcome on Saturdays and Tuesdays to see this engine and the Babcock power press as they whirl off copies of The Review like lightning flashes. Those who have never seen these or similar machines at work can form no conception of their modus operandi. This engine will also drive the presses in the job establishment. It is decidedly ahead of anything in its line ever seen in this section. It occupies very little space, is a safety automatic, and makes very little noise, and its consumption of oil is not over ten or twelve cents a day, making it as cheap or cheaper than gas. We would certainly recommend it to anyone needing a non-explosive, economical, light running and powerful engine. It was put in our office by that master machinist, Mr. W. B. Palmer, who has the agency for it. For any further information concerning it, address him at this place.

Office of Allegheny News, Allegheny, Pa., Aug. 14, 1890.
264 Beaver Ave.

Gentlemen— * * * * On behalf of the little engine I would say that I am more than satisfied. I am running a 31x46 Country Campbell, an ⅛ medium Gordon Jobber at the same time, and it will run the Cylinder Press at the rate of 960 impressions per hour. I lose no opportunity in recommending it to any who may want a reliable power. It is a curiosity to see so small a machine move two heavy presses. Respectfully yours, S. A. STEINHAUSER.

Office of Handford Printing Co.,
212 Griswold Street. Detroit, Mich., April 1, 1895.
Rochester Machine Tool Works, Rochester, N. Y.:

Gentlemen—Having used our 3 H. P. Acme Engine purchased of you in June, 1893, and which has been in constant use ever since, without repair to machinery, concluded to see how much she has cost us for fuel during the time we have had her, which is 21 months. Our plant consists of one 27x41 in. Campbell spring cylinder press, one 22x28 in. Hoe cylinder, two jobbers and one paper cutter, which engine runs with 80 lbs. of steam. Our oil bill for the above time is $155.99, making an average of $7.43 per month. Previous to using your engine we first had an Otto gas engine, which, if anybody has ever worked one, they know what they are. We fired gas engine and put in a two-horse electric motor, which cost us on an average $21.00 per month, and was often shut down on account of motor burning out, the load being too heavy for it, and also power being shut off for repairs of wires, etc. We think the above figures speak very highly for the "Acme" for economy and steady work; at any rate she is good enough for us. Please enter our order for a 4 H. P. Acme Marine Engine and Boiler, stuffing box, shaft and wheel, wheel to be two-bladed, as we are going to use engine in 37 ft. schooner-rigged cruising yacht. We will give you length of shaft later.

Wishing the Acme one continued round of success, we are,

Very truly yours, (Signed) HANDFORD PRINTING CO.

Again Mr. Judd writes: Feb. 12, 1892.

Rochester Machine Tool Works:

Gentlemen—I have used one of your 1 H P. Acme Engines in my office for four years, and it always gives perfect satisfaction under all circumstances. I have used one also for four seasons in a small launch, which has given me equal satisfaction; and it is the only small launch in this harbor that can maintain and keep up a steady gait with no variation of speed for hours at a time. The fact that I bought a second one for my own use shows what I think of them.

Yours truly C. E. JUDD.

New Iberia, La., March 10, 1890.

E. V. Millard, Printer, writes: "The Engine (1 H. P.) is the realization of my hopes, a perfect dream of success. When I tell you that I am no engineer, yet did set up the engine and set it to work with no other assistance than office hands, you can perhaps realize how delighted I am with it. I at once rigged an oil gauge on oil tank to ascertain consumption of oil. I found in 5¼ hours' run driving a 10x15 and 14x22½ Gordon Press all the itme, I only used 1½ gallons oil."

Press Spectator Office. Salisbury, Mld., March 11, 1891.

St. Louis Type Foundry, St. Louis, Mo.:

Gentlemen—The one horse Acme Automatic Steam Engine which we purchased from you some weeks since was set up by us without any help, save a common blacksmith to put in a pipe broken in shipment. It now runs a 10x15 Universal Jobber and a five-column quarto Prouty with perfect ease both at once. We set the pop valve at 60 lbs. and never need more. In fact, we could run one or two more presses, we believe, at the same time. Our brother printers need not fear to purchase the Acme if they want a good cheap power that is easily managed.

GALLAMORE BROS.

Office of F. W. Maxson, Job Printer
and Mnfr. of Rubber Stamp.s Rochester, N. Y., Jan. 10, 1889.

Rochester Machine Tool Works:

Gentlemen—The one H. P. Acme you put in for me 15 months ago is doing some good work. We run two Gordon presses (a ½ and ¼ medium) and a buzz saw; we also take direct steam from the boiler for heating our vulcanizing press. We also heat our entire office with steam from this little engine on about 4 gallons of oil for a run of 10 hours. With this engine we require no engineer, as was the case with our old coal burner. Our "devil" is our engineer, wipes her up and fills the lubricating cups every morning, and some days we do not have to touch her after once starting up. I believe we have power enough to run two more presses if we had them. Yours, etc. F. W. MAXSON.

Keokuk, Iowa, August 25, 1890.

Gentlemen— * * * * Will say that we would not take $500 for our engine (1 H. P.) if we could not get another.

BRAIDWOOD & STAHL.

Office of the Wide Awake
Canajoharie Courier. Canajoharie, N. Y., Nov. 19, 1889.

Rochester Machine Tool Works:

We used the Acme two horse-power Engine and Boiler for a year, and it has given the very best of satisfaction. It replaced a large coal burner, and does 50 per cent more work at 25 per cent less cost for fuel,

and can always be depended upon when you want it to work up to its full capacity. It requires hardly any attention, is clean and easily managed, and will do more than you claim for it. We use the exhaust steam to help heat the office, which it does well, and this is an item in the saving of coal. The engine will run our Campbell Country Printing Press (Cylinder), 1,200 impressions per hour, the folding machine and our job press all at the same time with ease, at 75 pounds of steam pressure. We heartily recommend it to printers as the BEST that can be bought for any light power.
W. B. FOREMAN.

Another from same: Canajoharie, N. Y., Feb. 16, 1892.

* * * We can at this time, after having used your Acme nearly four years, recommend it for light power in preference to anything we know of.
WM. B. FOREMAN.

Office of The Florence Times. Florence, S. C., July 27, 1889.

Dear Sir—Replying to your inquiry about my engine. The way I came to buy an Acme engine was this: I had a good 4 H. P. wood burner, but was always afraid of sparks. I examined into the merits of all oil burning outfits (three different kinds) and chose the Acme because it had points of excellence not found in others, the boiler in particular. Not being satisfied with my own judgment, although I am no novice in machinery, I sought good advice, and as a result I purchased a two H. P. Acme of the Rochester Tool Works. It has been at work since March last, and so far has not given the slightest trouble. What mine does: It runs my Campbell press with springs, which makes it run twice as hard as without them, at the rate of 1,200 copies per hour on a fuel consumption of only one quart of the cheapest kerosene oil per hour. Water power could not be cheaper than that. Yes, I believe a one H. P. Acme would run your press and the jobbers besides, but I would advise getting the two H. P., as it would be more economical in the end. It will do your work on just as little fuel as the one H. P., and you then have a surplus of power for any emergency that may arise; and in case you add more presses you have the power without exchanging engines. I know if you buy an Acme you will not regret it.

Fraternally yours, C. H. PRINCE.

Mobile, Ala., June 9, 1892.

To Rochester Machine Tool Works:

Your one H. P. engine is the best ever brought to this city, and does our work admirably. We could not be better pleased.

THE MOBILE COMMERCIAL. P. Begg

Office of the Times and Democrat. Orangeburg, S. C., April 3, 1891.

* * * * My Acme Engine is a little gem, and unless I could get another like it, $1,000 would not buy it.

J. L. LINES, Editor and Proprietor.

Washington, Kas., April 29, 1891.

* * * * We have had almost no trouble with my Engine; as for its running qualities they are just immense—really better than expected. The boiler is a gem; and we are delighted with the "Acme," taken all in all. Being so enthusiastic an admirer of the "Acme" I don't hesitate to try to induce others in need of power to buy one.

W. H. BESACK, Steam Book and Job Printer.

Smethport, Pa., April 24, 1891.

Messrs. Rochester Machine Tool Works:

Your two H. P. Acme Engine is a dandy. It runs my Campbell press without effort.

L. ROGERS, Treasurer of McKean Co., Pa.

Pittsburgh, Sept. 3, 1891.

Mr. J. Prager, Agent of Acme Engine:

The Acme Engine we bought of you some time ago is without doubt the greatest thing of the kind I ever saw. It is light but very powerful, and for printers' use I don't think there is an Engine in the world that would give such complete satisfaction.

STAR PRINTING CO., 6212 Penn Ave., Pittsburgh.

Office of
National Printing Co., 312 3d Street.
Milwaukee, Wis., Dec. 7, 1889.

Mr. Fred. Weiss, Agent Rochester Machine Tool Works:

Dear Sir—The 4 H. P. Automatic Safety Engine purchased of you September last has been given a thorough test and find it to be the best and most successful economical power in use, being far superior to the electric motor which we have been using. We are running a 32x46 Babcock and Cottrell Cylinder Press, a 22x28 Hoe Cylinder and a 10x15 Standard, using only about half the capacity of the Engine. Our fuel expense is less than 4½ cents per hour, being far less than we calculated at time of purchase. We can cheerfully recommend the Engine as durable, strong and compact, requiring very little attention and being everything that is claimed for it. Thanking you for the kindness you have shown towards us, and the assistance you have rendered in placing our engine and presses, we remain,

Very respectfully,
NATIONAL PRINTING CO.

The Berlin Courant,
L. E. Davis, Editor and Proprietor.
Berlin, Wis., Dec. 9, 1889.

Fred Weiss:

Dear Sir—The one horse power Acme Automatic Engine I purchased of you last February, has done all that it is represented to do. It runs our large Potter Cylinder press and Peerless Jobber, and could apparently do as much more if required. We also use the exhaust steam for heating our office. Since adding it to office we have been able to take a large amount of work that would otherwise have been refused. It seems almost indispensible. Can recommend it as a very desirable power for a printing office where light power is required.

Yours truly,
L. E. DAVIS.

Hudson, N. Y., Jan. 10, 1895.

Office of The Hudson Sunday Journal.

Rochester Machine Tool Works:

Dear Sirs—Over two years ago I bought one of your 1 H. P. Acme Engines. I have never spent a cent on it since, but now I think I will have to have a new atomizer. Please send me one by express. I cannot really express my gratification of the work done by my engine. I run a Campbell press, a folder and a 9x14 jobber all at once. It is the cheapest and best power Engine I know of. Hoping to hear from you at once, I am,

Yours truly,
(Signed) CHAS. H. VAN DEUSEN, Editor and Proprietor.

The Acme in Use on Farms, Etc.

To those who desire a Power for Farm use such as dairy work, churning and running cream separator, sawing wood, pumping water, threshing and cleaning grain, filling silos, cutting or grinding feed, etc., we would say that we can simplify the fire apparatus very much, without in the least detracting from the Safety and Efficiency, and at the same time reduce the cost of the Engine and Boiler by using the same apparatus we have always used on our Marine or Boat Engines, by controlling the intensity of the fire principally by hand and the amount of boiler pressure by the safety valve, which as constructed by us has never been known to fail. This manner of controlling the oil fire has after long and careful investigation been adopted by the Columbian Cream Separator Co., for use on all the Engines and Boilers built for them for sale with their Cream Separators.

East Wilson, Feb. 11, 1892.

Rochester Machine Tool Works:

The one H. P. Engine I bought of you about five years ago has proved to be all I expected. I purchased it for the purpose of running a fan in my evaporator, which it has done each year, running a portion of the time day and night; but we have found it quite equal of doing other work, such as sawing wood, cutting stalks, shelling corn and grinding feed. After the experience I have had, I am able to say that it pays, and that my farm would be missing a very important part of its equipment without the engine.

Very sincerely yours, B. F. BULL.

Parkersburg, Pa., Nov. 27, 1888.

Dear Sirs—Pardon my delay in answering yours relating to the 3 H. P. Acme Engine. Am getting along with it very well, although I have not used it a great deal since threshing. Have sawed wood. It will run a two horse Separator to its full capacity without any trouble. I can do far more work with it than a two horse tread power. It seems to be very little trouble to operate. It takes about 8 to 10 gallons of oil for a day's work. Yours respectfully, S. H. MURPHEY.

Office of Bacon & Rutherford,
Attorneys. Macon, Ga., July 21, 1889.

Rochester Machine Tool Works:

Gentlemen—As my "Acme" was ten days longer on the way than was expected some of my corn got too large, but the loss was not serious. The engine has given the most perfect satisfaction, and has far surpassed my expectations. The machinist who set it up for me and run it the first day said it was a "Jim Dandy." I don't know exactly what that means, but he evidently intended it as a high compliment. With a No. 11 "Ross" cutter we can cut 20 tons per day, stalks and ears. With a larger cutter we could, of course, cut far more.

Respectfully yours, A. O. BACON.

Note.—With a No. 14 Ross Cutter a 3 H. P. Acme has filled a 60 ton "Silo" in two runs of 8 hours each. R. M. TOOL WORKS.

Office of the
Rochester Machine Tool Works. Rochester, N. Y., Dec. 9, 1889.

Gentlemen—Having used one of your Engines—2 H. P., since September 1, 1887, in my business—cider and wine making, I would say that it has been an entirely satisfactory purchase. It will run my apple grater, a 11 inch machine made in New Jersey, called New Jersey Grater, at the rate of 70 bushels of apples, enough for one cheese, in 30 minutes. I also find it handy to cut fuel and for other purposes on the farm, and can recommend it for all such business. Fuel used, less than 1 gallon per hour. Respectfully, LOUIS KITZAL, Lyell Ave. Farm,
Gates, Monroe County, N. Y.

Brewerton, N. Y., Jan. 7, 1889.

Rochester Machine Tool Works:

Gentlemen—I will give a little statement of what the 4 H. P. Acme Engine purchased of you in September last has done. We have ground 70 bushels of apples for cider, as fine as they can be ground, in 16 minutes. We have also sawed 25 cords stove wood in 8 hours, and cut each stick from two to four times, the wood being of different lengths, and this was done with one fire, after getting up steam. There was a man here from Phoenix, Oswego county, last week and saw the "Acme" at work. He could not say enough in praise of its performance. He thought he had seen all the improvements in engines, but this beat them all. He could see no "discount" on it, and declares it far ahead of anything he had ever seen before.

(Signed) ADAM ANTHONY & SON,
Per J. M. Anthony.

Lawyersville, N. Y., Jan. 2, 1892.

* * * We did some pretty tall threshing last Thursday—360 bushels of oats in 3 hours and 40 minutes, and stopped three times to oil cleaner and rest in that time. We used one of Minard Harder's 28-inch cleaners, and the straw was from 18 to 30 inches in length. How is that for the "Acme?" I should be pleased to have you print this in next catalogue. I have ground eight bushels corn and oats in one hour with 75 lbs. steam. C. E. YOUNG.

Note.—This engine is 4 H. P.

Inanda Farm, Buncombe Co., N. C.

* * * I like your engine more every time I use it. I first used it with a 14 A Ross Cutter, cutting ensilage, and it cut it as fast as I could unload a wagon, with only one burner. I have been using it for cutting cordwood, with a 24 inch Diston saw, and running a wood turning lathe 20 inch swing, and am now using it with an Appleton Corn and Cob Crusher, also with one of their corn mills, and have no trouble whatever. Although I have not spared it, it burns very little oil, about 5 gallons for an 8 hours' run.

Ransom, Pa., Nov. 22, 1888.

Rochester Machine Tool Works:

Gentlemen—We would say that the 3 H. P. Acme Engine purchased from you is doing good work, driving our 30 inch Separator (built by Daniel Hulshizer, Doylestown, Pa.) to thresh oats, rye, buckwheat, etc. We have threshed oats at the rate of 80 bushels per hour from ordinary yield. The engine does fifty per cent more work than two good horses on our tread power, on about one gallon of oil per hour's run. We can recommend the Acme for this use as cheaper than horse power, and not at all liable to set barn or straw on fire.

Respectfully yours, D. A. SHOOK.

From the same: February 19, 1892.

* * * * I can now say that I have had no occasion to take back what I told you November 22, 1888. I can furthermore say that the Boiler and fixtures worked better last fall than when we purchased it. The Crank Shaft and Boxes do not show any perceptible wear after over three years' use, and the Governor works like a charm. * * * I can cheerfully recommend the Acme to all who are in want of small power Respectfully, D. A. SHOOK.

Another from same: Pine Grove Farm, Feb. 15, 1892.

* * * * I have now used the Acme Engine above mentioned, over five years; her boiler is perfectly tight and the engine is running as still as on the day it came from the shop. The power is wonderful. Could I not get another, money would not take this away. You remember this is the first two horse engine that went out of the shop.

H. E. COY.

Office of the
Central Union Transfer and Storage Co,
Rochester, N. Y. Rochester, N. Y., Jan. 6, 1891.

Rochester Machine Tool Works:

Gentlemen—I have used your Acme Engine and Boiler for something like three years on my farm at Scottsville, N. Y., with perfect satisfaction. The two horse engine purchased about a year ago has been in frequent use at my farm in cutting feed, sawing wood and similar work.

As a rule one man cares for the engine and feeds the fodder cutter or does the sawing. After starting the engine it is no more care than an ordinary lantern. In cutting my ensilage I cut from three to five tons per hour into half lengths, using a No. 15 Ross Ensilage Cutter. We put one hundred tons in silo, and during the whole job the engine was not seen oftener than once in two or three hours. We carried eighty pounds boiler pressure. From my own experience I can highly recommend it as a labor saver on a farm. Very truly,

H. L. S HALL.

Note.—Mr. Hall's farm is at Scottsville, N. Y.

R. M. TOOL WORKS.

Walkill, N. Y., May 7, 1891.

We have run the 3 H. P. Acme now nearly three years and it has given us good satisfaction, and never cost us one cent for repairs.

J. CODDINGTON, Engineer, Borden's Home Farm.

Frankport, N. Y., Sept. 3, 1891.

Mnfrs. Acme Engine:

Gentlemen—I am running an "Acme" for Mr. J. G. Lewis and we turn with it a DeLaval Separator and Churn at the same time. I am delighted with it, and although not an engineer, I have never had a moment's trouble with it. I would rather use one as motive power for a launch than naptha. Yours truly, FRANK S. SWIFT.

Emblem, P. O., Allegheny Co., Pa.

Highland Lake Farm. West Winsted, Ct., Oct. 4, 1890.

Geo. W. Davison, Esq., Treas.:

Dear Sir—I had no trouble in running the Acme Engine after you left here. I think it is about as perfect a piece of machinery as I ever saw. * * * I think that with everything in good order, tight belts and sharp knives, I can cut and put into the silo fifty tons of fodder corn in one day. Yours truly, R. E. HOLMES.

This testimonial comes from a man who has used his "Acme" Engine for over four years. R. M. TOOL WORKS.

Highland Lake Farm. West Winsted, Conn., Oct. 4, 1894.

R. E. Holmes.

Rochester Machine Tool Works, Rochester, N. Y.:

Gentlemen—We cut 22 acres of corn into the silo, averaging about 15 tons to the acre, with your Acme four horse engine for power. It run a No. 18 Ohio ensilage cutter, with 18 in. knives, with 14 ft. carrier, without a hitch either with the engine or boiler, or the cutter. We had one man at the cutter, one on the load, and two men laying corn onto the table of the cutter. We have learned how to run it with 80 lbs. of steam, or 100 lbs. of steam, if we wish to. This report is unsolicited, but we thought you might like to have it. Yours truly,

(Signed) R. E. HOLMES.

Mr. J. Prager:

The little two-horse power Acme Safety Engine bought of you has proved all you claimed for it. I would not be without it. I have an Appleton feed grinder, with a capacity from ten to fifteen bushels per hour. I grind all my corn and oats, make all my own corn meal and graham flour; have a disk cutter to cut corn fodder, hay and straw; when we haul our manure away from our barnyard you would not think we ever fed fodder by examining the manure, as there are no stocks lying around to annoy the farmer for two or three years until they rot. The nicety about our little engine is that it don't take much water to supply it. I can raise steam with a candy bucket full of water; one barrel of water will run it all day. I raised steam last week one day, started about 9 o'clock a. m. and by 3 o'clock p. m., had ground fifteen bushels oats, shelled thirty bushels of ear corn and ground it, and cut enough fodder to feed five cows, six head of young cattle and one feed a day for five horses. Imagine the turning that it would take to cut the fodder alone. Anyone can learn to run the engine as easy as he can a mowing machine or a binder. Every farmer ought to have one. You can refer anyone to me, and if they will come to my place I will be glad to show them what I can do with my Acme Engine. You can publish this letter whenever you please. Yours, etc., WM. J. RANKIN.

Clarksville, Tenn., January 31, 1890.

Spencer, N. Y., March 5, 1892.

Rochester Machine Tool Co., Rochester, N. Y.:

The little Acme Engine I purchased of Mr. Woodford works very nice, and I am more than pleased with it. Last winter we used a three horse power wood engine for cutting corn fodder and sawing wood, and were bothered all the time by not having power enough and could not keep up steam. With the two H. P. Acme I can run the same cutter with not near a full head of oil, used as fuel, and do one-half more work in same time. My cutter is a 13 inch Baldwin, and is not near large enough to work engine to its full capacity.

Respectfully yours, W. A. HOLDRIDGE.

Green, Chenango Co., N. Y., Oct. 25, 1892.

Rochester Machine Tool Works:

* * * * The people here thought the little thing (2 H. P.) could not do much until I cut my ensilage corn—running a No. 14 Cutter, and could have cut more if I used a larger size. As it was I could cut as fast as six men and two teams could get the corn to the barn. * *

C. E. RACE.

The Acme In Boats.

Middletown, N. Y., May 9, 1894.

Rochester Machine Tool Works, Rochester, N. Y.:

Gentlemen—The 1 H. P. Marine Engine ordered for me by Brink & Clark arrived safely, and I am more than pleased with it. I want to thank you for sending me such a complete piece of machinery. Two hours after I had it uncrated I had it set up, and had it running in splendid shape. After placing it in my boat I had some little trouble with the atomizer delivering too much oil, but I soon remedied that by turning the nut forming the valve, and then it worked beautifully. I employed neither machinist or engineer, which speaks well for the simplicity of the apparatus. I thank you for your kind wishes, and expect to send you a picture of my yacht "Cordelia." She is twenty-two feet long on the water line with five feet beam, and thus far works to perfection. I wish you would hurry along the safety valve, which I need badly. For the present I am running it without one.

(Signed) Yours truly, HORACE W. COREY.

Office of Sanford Mills,
E. M. Goodall, Pres. Sanford, Me., March 22, 1889.

Rochester Machine Tool Works:

Gents—The two horse power marine Acme, which I bought of you, was placed in a sloop-rigged cruising yacht, 32 feet long, 8 foot beam, draft 29 inches. I shipped the boat from here to Norfolk, Va., and from there cruised down the coast to Florida, leaving Norfolk December 29, 1888. We took our time on the trip, stopping at various places of interest, and reached Titusville, Fla., on the Indian River, February 1, 1889, having run the boat 1,101 miles without having stopped the engine for repairs or to clean the atomizer during the entire run. Our longest day's run was January 25th, 1889, when we covered 95½ miles, making the run in 16¼ hours without a stop. The engine worked to my entire satisfaction during the whole trip, driving the boat in slack water, without sails, 4½ miles an hour.. Yours truly, E. M. GOODALL.

Rochester Machine Tool Works:

Gentlemen— * * * We are all surprised at the Yolande's speed. She makes about 6 miles an hour up stream against a 3½ or 4 mile current. The Acme Engine is certainly a success. * * * My boat is doing splendidly, and in event of my getting another and larger boat, will want the Acme Engine if possible. * * * Can you furnish as high as six horse power outfits?

Yours truly JULIEN F. GRACEY.

Office of B. F. Pethram. Skaneateles, N. Y., August 1, 1887.

Rochester Machine Tool Works:

Gentlemen—The Steam Siphon sent a few days since has been placed in our boat and it is a valuable addition to our boat outfit. We could find no fault in our treatment by your firm even if we wished to do so. The one H. P. Acme Enginee and Boiler which you placed in our boat last spring has been in almost daily use since the 1st of May, and we can find no fault with that either. It will run our boat with thirteen people at the rate of six miles per hour, and we have towed a nine ton cabin yacht two miles in thirty minutes. During a twelve mile run through a heavy sea the engine worked perfectly, and required no more attention than if the water had been smooth. We know of no engine or motor of twice the power that we would exchange even for. Refer to us at any time, and it will be a pleasure to show the engine or give any information regarding it to an intending purchaser.

Yours truly, B. F. PETHRAM, G. H. Butler, D. D. S.

Pittsburgh, Pa., Feb. 15, 1892.

Acme Automatic Safety Engine Co., J. Prager, Agt.:

Dear Sirs—We have been using your one-horse Marine Outfit in the boat Daisy. She makes a speed of 7½ measured miles an hour, and there is not a boat on the river for the power that can beat us. Can carry steam at 135 lbs. without any trouble; have had no trouble in having it passed by the Marine Inspectors, and have had no trouble with the outfit. She works like clockwork, and will recommend it to anybody who wants a marine outfit. The Daisy is 25x4 feet, draws 30 inches loaded; have run it 250 miles without any trouble or breakdown.

Yours respectfully, W. M. & W. H. COOKE.

The following confirms the above better than anything else that could be said:

Office of Sanford Mills,
E. M. Goodall, Pres. Sanford, Me., April 2, 1889.

Rochester Machine Tool Works:

Gents—Please send to Parker & Nagle, Boat Builders, Portland, Me., one of your two horse Marine Engines, same as you sent me last fall, and send bill to me. I am having a launch built, 5½x20 feet, and wish to set the boiler and engine before the boat is planked. Let me know how soon you will ship. Yours truly, E. M. GOODALL.

Rochester Machine Tool Works: St. Paul, Minn., Feb. 2, 1889.

Dear Sirs—This summer passed I placed a one H. P. Acme engine in a 23 ft. yacht. Mr. Boynton, your agent, sold it to me, and I wish to say here that I was more than pleased with it. I used it all summer at my place on White Bear Lake, and before the season was over two more, with two H. P. engines of yours, followed mine. Both of these sales were due to the excellent satisfaction given by your engine. My boat made 7½ measured miles the second or third time I ran her, and I had not any trouble. Yours, T. W. INGERSOLL.

Office of Wilmot, Castle & Co., Mnfrs. of
The Arnold Automatic Steam Cooker,
176 to 191 Main Street. Rochester, N. Y., Dec. 19, 1888.
Rochester Machine Tool Works:

Gentlemen—The two H. P. Acme boat engine and boiler purchased of you last spring has given us perfect satisfaction, aside from the noise of the atomizers, to which one soon becomes accustomed. It runs perfectly quietly, and without that unpleasant jar and vibration that is so objectionable in some small engines. It was put in a boat 26 feet long by 5 feet beam, and has been used in all kinds of weather, with excellent results. Neither pitching or rolling in a heavy sea makes the slightest difference in the steadiness of the fire, nor caused the boiler to prime. The boiler will make abundance of steam to run wide open at any pressure, be it 40 pounds, or 130 pounds. With properly adjusted fires, shortness of steam is unknown. As we have taken a number of long runs, we can say that we can always depend upon the engine working properly and with very slight attention.

Yours truly, ARTHUR CASTLE.

Note.—The above testimonial refers to one of our engines and boilers for use on Government waters, and was used on Lake Ontario and St. Lawrence.

R. W. Hurd, Dentist,
23 South Pinckney Street. Madison, Wis., Nov. 28, 1889.
Mr. Fred Weiss, Milwaukee, Wis.:

Dear Sir—After using one of your Acme Automatic Safety Engines last season in my little boat, I must say it is rightly named Perfection. I have a one H. P. for boat 19 feet long, 6 foot beam, can run from 6 to 8 miles an hour. She is so simple that my boy Fred, 14 years old, runs her all over the lake. Respectfully,

R. W. HURD.

The Rectory, Alberton, P. E. I., Sept. 30, 1893.

Dear Sirs—I have fully tested the Acme in all kinds of weather and now thoroughly understand her, and can unhesitatingly say that she is perfection itself. Yours truly, J. M. FORBES.

Testimonial from D. W. C. Hoover, of Buffalo Argentine Paper Co.
Buffalo, N. Y., June 15, 1893.
Rochester Machine Tool Works:

Gentlemen—I take great pleasure in sending you my sincere thanks for so completely filling your promises. The little 1 H. P. Marine Engine is a jewel and propelled my 24 foot boat at the rate of 8 miles per hour for hours at a time. I made her maiden trip from Rochester to Buffalo on the canal, a distance of 96 miles, in 13 hours and 50 minutes against a strong current all the way. The bolier is a splendid steamer, and, in fact, I haven't a complaint to make. Yours very truly,

D. W. C. HOOVER, 212 Glenwood Ave.

The Acme for Natural Gas.

The following letters refer to "Acme" Engines and Boilers arranged to burn "Natural Gas" for fuel, and show the economy of our Patent Boiler over upright tubular boilers that were supposed to give good results when fired with coal:

Buffalo, N. Y., Dec. 15, 1888.

Rochester Machine Tool Works:

Gentlemen—I have fully tested both the 1 H. P. and the 2 H. P. Acme Engines with the Natural Gas fuel, and can candidly say they are far superior to any other engine with which I am acquainted. The 2 H.

P. I am now using certainly has great capacity for the amount of fuel consumed, and no doubt is the most economical engine in the world. Simplicity, good material, with superior workmanship, combine to make the "Acme" the most desirable small power now extant.

Yours truly, G. W. HALL.

Office of L. P. Beyer & Co.,
Sanitary Engineers and Plumbers. Buffalo, N. Y., July 13, 1889.
Rochester Machine Tool Works:

Gentlemen—The one horse power Acme Automatic Safety Engine you set up for us last November is in daily use for running pipe threading machine and cuts two inch pipe to a charm. We use natural gas as fuel, and the consumption is so small that the company cannot get state of meter to send in bill. It is like "Barnum's Show," one of the wonders of the world. Very respectfully yours, L. P. BEYER & CO.

Office of the Natural Gas Fuel Co. Buffalo, N. Y., Dec. 13, 1880.
Rochester Machine Tool Works:

Gentlemen—We have been using a 2 H. P. Acme Automatic Safety Engine for the past eighteen mouths, running large pipe cutter, drill press, large grindstone, etc. During the time it has required but very little attention. I believe it to be as nearly automatic as anything without brains can be. I can heartily endorse it as the best of any I have seen, especially for economy of fuel. With an upright boiler and engine our fuel bill averaged about one dollar per day of ten hours, or a fuel consumption of about 5,000 feet of gas. Doing the same work, the Acme averages about 20 cents for the same number of hours, or a gas consumption of about 1,000 feet. I can cheerfully recommend the Acme Engine for economy, safety and convenience.

Yours truly, W. B. DALY, Supt.

Office of
Buffalo Stained Glass Works. Buffalo, N. Y., Dec. 18, 1888.
To The Rochester Machine Tool Works:

Gentlemen—The one horse "Acme" engine and boiler I purchased of you in August, 1887, has worked to my entire satisfaction. The cost for fuel (Natural Gas) is seven cents per day. It has taken the place of an old style steam engine of 4 H. P., which cost about $1.25 per day for fuel. With your engine I can do one-third more work than with the old one. It takes up very little space, is clean and very easy to take care of.

Yours respectfully, E. J. RIESTER.

Miscellaneous Uses.

The following is from the First Vice-President of the Standard Oil Co.:

Standard Oil Company. Cleveland, O., Nov. 13, 1889.
Rochester Machine Tool Works:

Gentlemen—The 4 H. P. "Acme" and boiler you shipped me last July is giving perfect satisfaction, and is producing from a 75 light "Brush" dynamo, 45 lamps (incandescent) with apparently full candle power. I think there is no question but that it will continue to do so and give me all the light desired. I think your engine the most perfect of anything of the kind I have ever had experience with.

Very truly yours, FRANK ROCKEFELLER.

Note.—This Engine is at Mr. R.'s country seat at Wickliffe, Ohio, and as the house is large and wired for 95 lamps the circuit is unusually long to be operated by so small an engine. The estimate of the Brush Company was that not less than 5 H. P. actually delivered on belt would run the 45 lamps on this circuit. R. M. TOOL WORKS.

Caldwell, N. J., June 3, 1889.

Rochester Machine Tool Works:

Gentlemen—My 3 H. P. Acme Engine is doing me good work, fully up to my expectations. I run 14 inch circular saw, ripping 2 inch pine, with one atomizer, with a cost of about 3 cents per hour, and does the work so easily that one would think it was only running for pleasure.

Respectfully, SHERMAN PADDOCK.

FondDuLac, Wis., March 11, 1892.

Rochester Machine Tool Works:

Answering your inquiry about the 3 H. P. Acme Engine and Boiler bought of your agent, Fred. Weiss, nearly three years ago, we are pleased to say that it is all O. K. yet. We run wood lathe, circular saw, boring machine, jig saw and grindstone, and, unless the sawing is heavy, it would run twice as much. We have never been able to use all the steam the fires will make, although we have ripped 3½ inch tough oak. We have made steam from cold water in 7 minutes, but usually takes 10. We very seldom use more than one of the fires. For ordinary work we only carry from 30 to 60 lbs. of steam. Our necessary expense for repairs has not been $2 so far. Cost for fuel less than five cents per hour. The engine has greatly lightened our labor and increased our income.

TRIPP & SON.

Office of W. W. Mildrum,
Mfg. Clocks and Compass Jewels. East Berlin, Conn., Aug. 13, 1887.

Rochester Machine Tool Works:

Gentlemen—I wish to inform you in regard to the 1 H. P. Acme Engine and Boiler which I purchased from you last March; at first I did not like it at all. The atomizer troubled me, and the first day would have sold out cheap had I not expected it would improve on acquaintance. At first I ran it as when shipped to shut off at 85 lbs. of steam. I now run it with 38 lbs of steam, shut off at 40 lbs. It runs much stiller, in fact the pump makes about all the noise. It makes me smile to think how particular I was to make arrangements to exchange for a 2 H. P. if it should not be enough to do my work. The one I have now would run two or three shops like mine, and have power to lend to the neighbors. Some of my machinery is not set up, but with two small lathes and a grinder with 22½ lap, cutting agate, made a run of 8 hours day before yesterday on about 1½ gallons 11° test oil. Have not measured what was consumed yesterday, but think it was still less, as the grinder was not in use all day. Am very much pleased with it. It is economical, runs very steady, and after it is once started is almost no trouble, in fact, I have got so now that I hardly look at it from morning until noon. I believe the engine burns less oil and works stiller from week to week. I suppose because it is getting smoothed up and I am getting to know how to handle it. Anyone who would kick at the cost of 1½ to 2 gallons of 120° test oil per day deserves to work by foot power all his life. Please send me some of your circulars for distribution.

Respectfully yours, W. W. MILDRUM.

Note.—Mr. Mildrum had no instructions regarding his engine, except such as contained in the printed matter we send by mail. If he had, things would have gone smooth from the first.

R. M. TOOL WORKS.

W. W. Mildrum,
Mnfr. of Compass Jewels. East Berlin, Conn., Feb. 12, 1892.

Rochester Machine Tool Works:

Gentlemen—It is now over four and one-half years since I started my 1 H. P. Acme Engine for business. It has been running nearly every working day since and some of the holidays. It is doing its work as well and cheaply as in the beginning. I am perfectly satisfied with its performance and would not exchange it for any other unless it was a new one of the same make. Yours truly, W. W. MILDRUM.

Bridgeton, N. J., May 19, 1892.

Rochester Machine Tool Works:

* * * * We have had this Acme Engine in use four years and it works splendidly still.

PROBASCO & LANING.

Franklin, Ky., June 21, 1892.

Rochester Machine Tool Works:

Our little 1 H. P. Acme Engine is just the thing we have been wishing for. It is almost as noisless as a sewing machine. It has not stopped from any cause but twice in the last 3 weeks. It is as nearly perfect as an engine can be made. We are pumping 4,000 gallons daily from our mineral well, which is 10 feet deep, and I believe we could run a half dozen pumps at the same time if they were attached to it. M. S. HARRIS, Mayor.

The following is after two years' use:

Office of W. W. Mildrum,
Manufacturer of Compass Jewels. East Berlin, Conn., Feb. 17, 1889.
Rochester Machine Tool Works:

Gentlemen—I would say my little engine works as well as ever, and I would not exchange it for anything else which I have ever seen. When I ordered it, did not expect to run it over four days per week on an average, but for more than a year have run it nearly every day 8, Sundays (not holidays) excepted. All this winter it has been run all day, and often from 8 till 9 o'clock at night, stopping only long enough at noon and evenings to oil up. It gives me absolutely no trouble after getting up steam. Yours truly, W. W. MILDRUM.

A. L. Knapp, Grocer and Postmaster. Manschehter, N. Y.

Gentlemen—The "Acme" is rightly named, and up to the present time I have not laid out one cent of necessary expense. I bought it one year ago last May, and can, as yet, see no opportunity or need for further improvement. It replaces another make of oil burning engine, which required twice as much fuel to do the same work. I frequently leave it running alone while attending to the mails or getting dinner. It now looks as good as new and sets in the store where it speaks for itself to the admiration of all who see it.

Botanic Drug Store. Sandy Lake, Pa., Dec. 10, 1888.

Gentlemen—The little 1 H. P. Acme Engine is working O. K. There has been a large number of persons to watch the "Acme" running. We tell them that it is the only Engine made that has brains enough to take care of itself, and that it is cheaper to own and run than a wind wheel, as the first cost is less and repairs nothing.

Respectfully yours, F. F. & J. C. FEATHER.

Another from Mr. Hatter, Feb. 11, 1892.

Rochester Machine Tool Works:

Gentlemen—The one horse power Acme Safety Engine which I purchased of you four years ago, and have used three falls at my Evaporating works, has given perfect satisfaction. Last fall I run it ninety-five days, paying only 50 cents for repairs, and using only three gallons of oil in ten hours. I would recommend this engine for any work requiring light power. Respectfully yours,

L. W. HATTER.

Merriman Bros., Dealers in
Farm Machinery, Etc. Fort Atkinson, Wis., Nov. 29, 1889.
Rochester Machine Tool Works:

Gentlemen—We have been using one of your 3 H. P. Acme Automatic Engines, bought of Fred Weiss, for the past seven months, and can say that it has given us the best satisfaction in every respect. We are running one 15 inch iron turning lathe, 20 inch drill press, two emery wheels, and have power to spare, with one burner. As for fuel, it costs us thirty cents per 10 hours' run. It requires but very little attention is easily managed, almost noiseless. In its automatic features it is the most complete and reliable piece of machinery that we have seen. We can get up 60 pounds of steam from cold water in 9 minutes at the present time. We can recommend the Acme to anyone wishing small power. Anyone wishing to correspond will have permission to do so.

Yours respectfully, MERRIMAN BROS.

Pittsburgh, Pa., Sept. 14, 1891.

McMahon Bros. & Adams, 52 Fourth Ave.

Mr. J. Prager, City:

Dear Sir—We purchased from you about two years since a 2 H. P. Acme Engine and Boiler and must say it has exceeded our expectations; have had no trouble with it at all. We can highly recommend the Acme Engine as one of the best.

Yours truly,

McMAHON BROS. & ADAMS.

Waukesha Sanitarium. Waukesha, Wis., May 10, 1892.

Rochester Machine Tool Works:

* * * I must tell you that you did a good job on the little Engine. Our boiler is set to blow off at 60 lbs., and yet it enables this little 1 H. P. engine to drive two line shafts 10 and 15 feet long, an Empire Laundry machine, a large wringer, a Chicago Mangle, two of D. Taylor's Swedish movement machines, which run 800 revolutions per minute, and it runs them all loaded at the same time, which is a wonder to all who see it.

J. P. DARGITZ, M. D.

Sanday Lake, Pa., July 12, 1890.

Rochester Machine Tool Works:

Gentlemen—The Acme Oil Engine (1 H. P.) has been running our elevator and printing press, and pumping water since it was purchased from you in January, 1888, two years ago, and is in as perfect order as when purchased. I would not care to trade for a new one, as it is not perceptibly worn. We opened the top of cylinder last week, and found condensed water on top of piston heads; after carefully drying with a sponge we filled the cylinder with 120° test refined oil, and let it stand for 24 hours, and it did not leak a drop, being dry on underside.

DR. J. C. & F. F. FEATHERS.

Milwaukee, Wis., Dec. 11, 1889.

Office of L. Maas, Mnfr. of All Kinds of Brick Moulds.

Mr. Fred Weiss:

Dear Sir—Permit me to add my testimony in favor of the four horse power Acme Automatic Oil Engine I purchased two years ago. It has done all you claimed for it. It is labor and fuel saving in every respect, as a man can do a day's work besides tending to the engine. Thanking you for the fair and gentlemanly dealing with me, I am,

Yours truly, L. MAAS, 681 Twelfth St.

Mr. Maas runs a pony planer, rip and cross-cut saws, drills, etc., and uses 8 gallons of oil a day.

F. W.

Fort Atkinson, Wis., Nov. 5, 1889.

Fred Dawes, Bakery and Restaurant.

Fred Weiss, Milwaukee, Wis.:

Dear Sir—After using your 3 H. P. Acme Automatic Safety Engine for about 5 months, I am more than satisfied with it, as it does all you claim for it. I run a twenty quart ice cream freezer and a forty quart freezer, making in all a sixty quart freezer, and plenty of power to spare, and had no trouble with the engine after it was set up. Would not take twice what it cost if I could not get another.

Yours respectfully, **F. DAWES.**

Office of Steinmeyer & Hesse. Milwaukee, Wis., Nov. 20, 1889.

Mr. Fred Weiss, Agent Rochester Machine Tool Works:

The engine we purchased of you in October, 1886, we have still in use, and it gives us entire satisfaction. We are using the same for running our coffee mill, and also heating our office with steam. It is one horse power, and we are using it about 14 hours a day, and our expense for fuel is not more than one cent per hour. We recommend the engine to any party having use for any such purpose or other light power.

Respectfully yours, STEINMEYER & HESSE.

Office of J. D. Walker,
Wholesale and Retail Milk Dealer and Grocer,
109 Grant Street. Pittsburgh, Pa., Dec. 13, 1889.

J. Prager, Agent Rochester Machine Tool Works:

I have in use a one horse power Acme Automatic Safety Engine, and am well pleased with it. I run a sixty gallon churn with it, and it does its work to the astonishmnet of all who have seen it runnnig.

J. D. WALKER.

Murray, N. Y., Dec. 10, 1888.

Rochester Machine Tool Works:

Gentlemen—I have used the "Acme" 1 H. P. Engine in my Evaporator for the past two months to run two of the three fork paring machines (the Eureka) and the fuel consumption averaged 2½ gallons of kerosene to pare one hundred bushels of apples. I think I could run a dozen machines with this same engine. I find it all it is recommended to be, and am well pleased with it. (Signed) L. W. HATTER.

East Berlin, Conn., Dec. 26, 1890.

Geo. W. Davison, Rochester Machine Tool Works:

Dear Sir— * * * I have had one more seance with the 4 H. P. Acme and the Little Quaker City Mill. * * * We ran the mill several hours on cob corn, and I tell you Mr. B. was pleased with both engine and mill. We succeeded in grinding the cob corn into fine meal (no one handling the Engine in any manner), crushing and grinding at the same time at the rate of nearly 12 bushels per hour, with steam steady at 90 pounds. Could do better with more practice.

Yours very truly, W. W. MILDRUM.

Silver City, N. M., March 25, 1892.

Rochester Machine Tool Works:

The one horse power Acme Engine purchased from Mr. Buckley, in Chicago, has been running now over one month, and so far is a pink of perfection. The best part of it is I am using wood for fuel, and very successfully. Combinations are such that the cheapest oil I could get was 20 cents per gallon by the barrel, consequently have improvised a new fire-box for wood, which allows me to run steadily with little attention and less wood than a very small stove would consume. To anyone ordering for such Engine I could furnish a fire-box for wood at a cost of $4 or $5. Have not had the least trouble in keeping steam up to 80 lbs. while working. When not working, a pail full of blocks will keep her all day. Am very much pleased with the engine, and should you see fit to let me act as agent for them, will undoubtedly be able to make some sales. HARRY S. JONES.

The Acme Engines Pumping Water.

In the spring of 1892 we shipped a 2 H. P. "Acme" Engine with a Gould's "Challenge" Pump to Susquehanna, Pa., for supplying a summer hotel with water. The water was taken from the Susquehanna River by suction, forced through 1,100 feet of one inch pipe to a tank at an elevation of 100 feet above pump. At the close of the season the report was that the amount of water delivered in tank was 1,100 gallons per hour on a fuel consumption not exceeding 6 gallons of kerosene oil for a ten hours' run. Mr. F. H. Pride, Susquehanna, Pa., can give further particulars.

In the spring of 1894 we shipped to Pomfret, Conn., a 3 H. P. "Acme" Engine and Boiler, with the same size Gould's "Challenge" Pump, for supplying an Infants' Summer Hospital with water. This water is taken from Bark Meadow Brook 300 feet by suction, elevated about 11 to 12 feet. It is then forced through 2,900 feet of 1¼ inch iron pipe to a tank elevated 100 feet above level of pump, and after it had been in use about six months Mr. Thos. K. Green, who had charge of it, wrote us that the duty performed was 900 gallons of water per hour delivered in tank, and that the engine would do this work on a boiler pressure of 50 lbs. of steam. For further particulars address Mr. Thos. K. Green, Bark Meadow Farm, Pomfert, Conn.

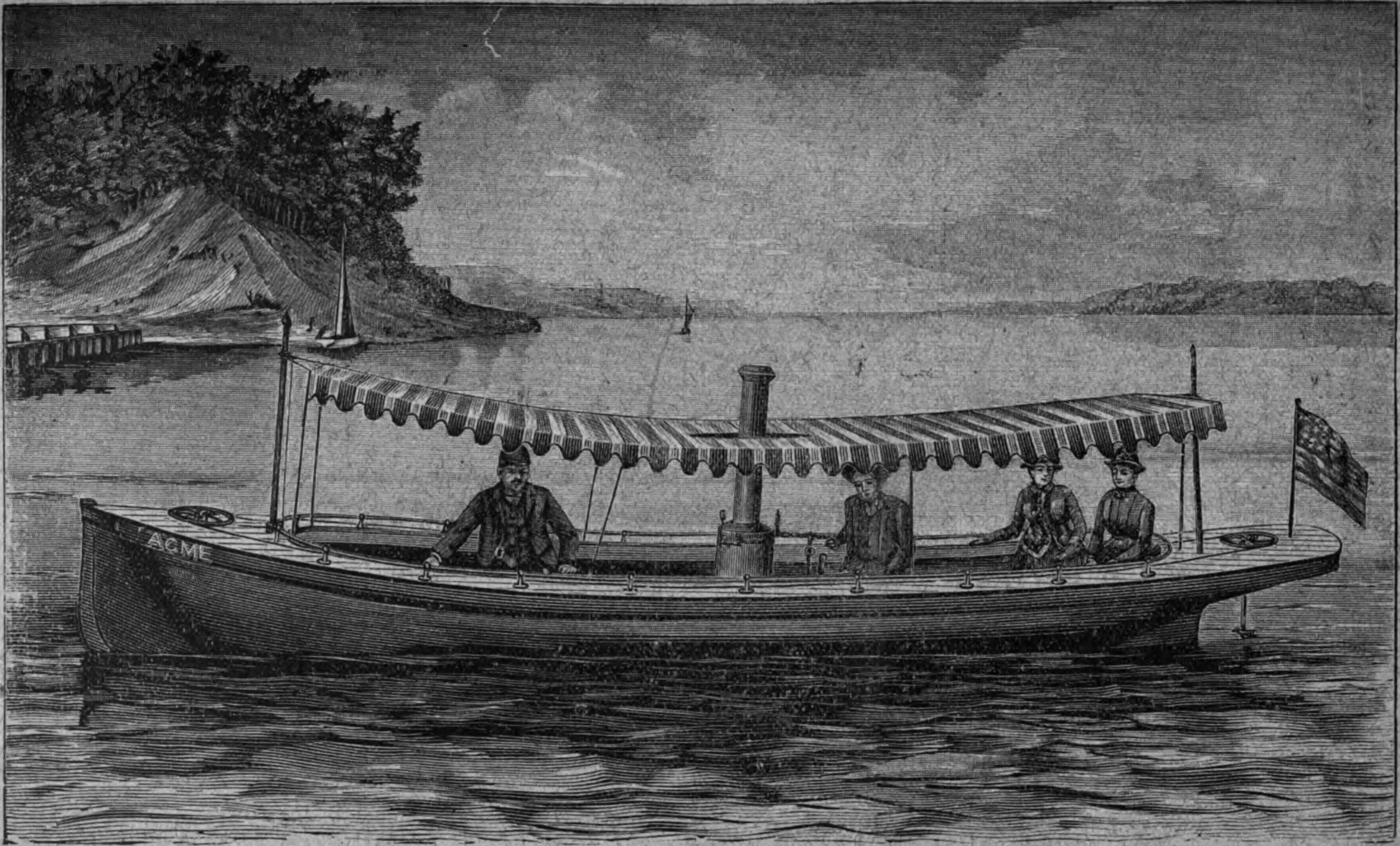
In March, 1894, we shipped to J. W. Wickham, Mattituck, L. I., N. Y., a ½ H. P. "Acme" Engine and Boiler to be used in pumping water with a deep well pump formerly run by a 12 foot steel wind mill. This pump was also run by belt direct from Engine, and the trouble with the wind mill was that in the season when most water was needed there was apt to be the least wind to drive the pump. Our gurantee was that if capacity of pump was sufficient this ½ H. P. Engine should pump the water from well 70 feet deep to a tank 35 feet above level of ground at the rate of 300 gallons of water per hour. Mr. Wickham's report was that he filled a 450 gallon tank in one hour and 20 minutes with this outfit, and after one year's use there has been no word of complaint.

To parties who wish information with regard to pumping water. If you will give us the following data, to wit: The height to which water is to be elevated from surface to tank, the distance or length of pipe necessary, and the quantity of water wished per hour, we are prepared to make prices on an outfit that will do the duty. We have in the west 2 H. P. "Acme" Engines and Boilers that are pumping water for irrigation purposes with rotary pumps, where the water is elevated from 12 to 15 feet, and where the water delivered is 2,000 gallons per hour, with a 2 H. P. "Acme" Engine and Boiler.

Riverside Sanitarium, J. P. Dargitz, M. D.,
Physician and Surgeon. Wellsville, N. Y., Nov. 13, 1889.

Rochester Machine Tool Works:

Gentlemen—The little 1 H. P. Engine I purchased last May does even better than was expected or promised. It runs the Gould's Alert Double Action force pump, drawing water 11 feet through 1¼ inch pipe with one elbow, forcing it through 1 inch pipe 100 feet on a level, up 50 feet through five elbows and three bends in pipe of nearly ¼ turns each. Capacity of pump is rated at 700 gallons per hour. Our tank holds 500 gallons. With 70 lbs. steam have repeatedly filled the tank in 35 minutes, or equal to 850 gallons per hour, which is 20 per cent more than guaranteed. Our fuel is natural gas. As it is carried down 40 feet in ⅜ inch pipe we do not get a strong flow, but when all is cold we get 60 lbs. of steam in 7 minutes after lighting the gas. After raising steam and starting pump we adjust the flow of gas to maintain 70 lbs. of steam, and engine and pump are left to take care of themselves until tank is filled, when we turn off the gas. It is as nearly automatic as can be made. The above work is done nearly every day, and can be seen by anyone. Yours truly, J. P. DARGITZ.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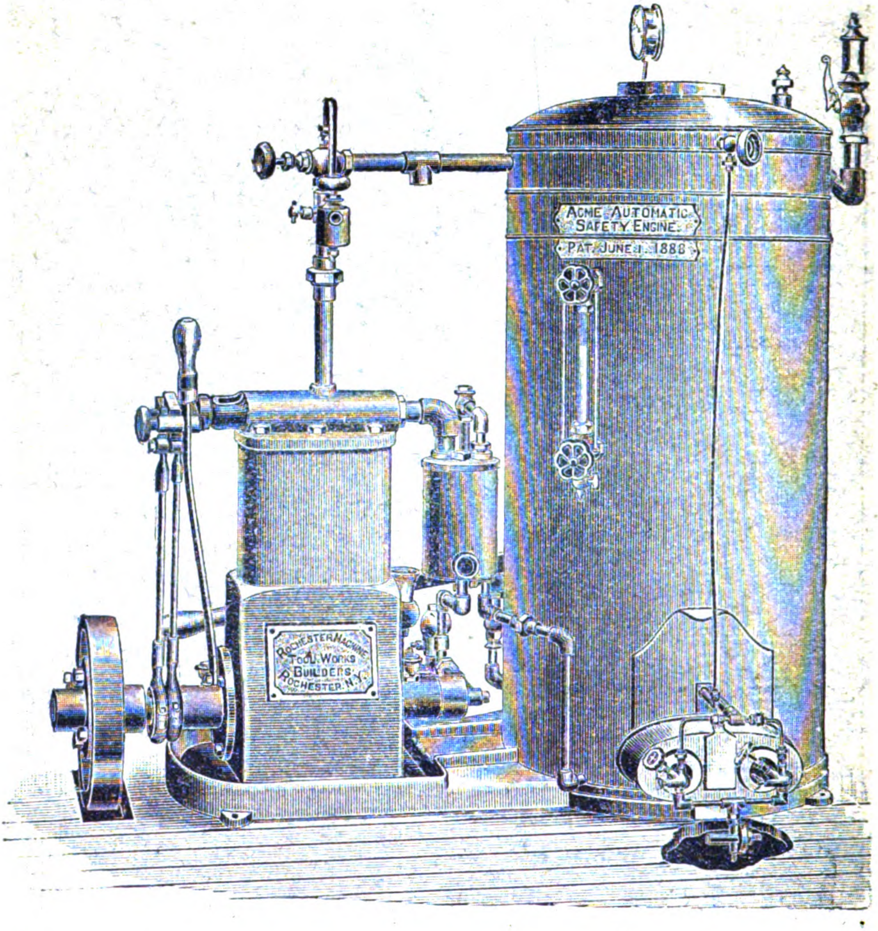
ACME AUTOMATIC SAFETY ENGINE
PAT. JUNE 1. 1888
ROCHESTER MACHINE TOOL WORKS BUILDERS ROCHESTER N.Y.

The Marine Acme Automatic Safety Engine.